Community-centered Clinical Services

CASE STUDIES AND LESSONS LEARNED FROM IMPLEMENTING KEY POPULATION PROGRAMS IN INDIA

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Contents

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Executive Summary

I n 2003, the Bill & Melinda Gates Foundation launched Avahan, an ambitious program to help reduce the spread of HIV in India. Avahan provided an essential package of prevention interventions for key populations at high risk for HIV, including female sex workers (FSWs), high-risk men who have sex with men (HR-MSM), transgender people (TG), people who inject drugs (PWID), clients of sex workers in the four southern Indian states with the highest HIV prevalence, and truckers at halt-points on the national highways. The Avahan package of prevention interventions included peer outreach, behavior change communication, condom distribution, syringe and needle exchange, and treatment of sexually transmitted infections (STIs). To address stigma and violence against key populations, the program used community mobilization and structural interventions.

The Avahan program was implemented in two phases. The first scale-up phase (2003-2009) was implemented with the help of state lead implementing partners (SLPs) working through local non-governmental organizations (NGOs) and community-based organizations (CBOs) to provide services. In the second sustainability phase (2009-2013), the interventions were successfully transitioned in a phased manner to the Government of India, with some continuing support from Avahan for capacity building of CBOs.

Clinical services were a large component of the program and included prevention and treatment of STIs, early diagnosis of HIV with referral to HIV care and treatment services, and referrals to other key services related to prevention of HIV/STI and the general health and well-being of the populations served. During this time, the Avahan program developed many innovative approaches to provide clinical services tailored to the needs of these key populations. This document shares the good practices and lessons learned through case studies, with the goal of helping other HIV prevention program implementers strengthen their capacity to deliver high quality services to key populations and their sexual partners. Although the case studies featured in this publication are from the Indian context, many of the lessons will be relevant throughout the Asian region, as well as globally.

The primary audience for this publication is program and technical officers responsible for planning and implementing clinical and support services for key populations at risk of HIV in resource-constrained settings. The document will also be useful for national, regional, and state

public health officials, donors, policy-makers and advocacy managers seeking to improve STI and HIV clinical services for key populations and their sexual partners.

Through detailed case studies, this publication offers practical advice for implementing the clinical service component of HIV/ STI programs for key populations and at-risk men such as truckers, including managing operational issues and overcoming challenges that arise during planning and implementation of services.

The 23 case studies were selected and developed through workshops and a series of consultations with program and technical officers from the SLPs, technical experts, and FHI 360 STI capacity building project team. The group developed a list of thematic topics, and invited all Avahan SLPs to identify and document good practices. The technical experts and FHI 360 collected additional information through document reviews and interviews with the SLPs to finalize the case studies for inclusion in this publication.

Chapter 1, Community-led Approaches for Clinical Service Provision, describes community-led approaches and their role in increasing clinic utilization. The experiences of two SLPs in developing community-led STI clinical services are presented in case studies.

- Case study 1.1. Clinic management by a sex worker-owned community-based organization (CBO): *Community mobilization of sex workers that led to community ownership and management of clinic services. This successful project has been recognized as a regional learning site.*

- Case study 1.2. Creating a community empowerment model: *A community empowerment model that resulted in a paradigm shift from an NGO-led 'targeted intervention' to a community-led HIV prevention program for key populations.*

Chapter 2, Customizing STI Service Delivery Models, presents the advantages and disadvantages of the main service delivery models, including NGO-run static and outreach clinics, preferred providers and government clinics. Seven case studies present the SLP experiences in implementing these models, tailored to the needs of key populations.

- Case Study 2.1. Nurse-led STI management: *Training of nurses as STI service providers to increase availability and access to services for FSWs and PWID in the context of a shortage of doctors in rural areas.*

- Case Study 2.2. Reaching female injecting drug users: *Design and implementation of services tailored to increase access to harm reduction and other clinical services for female injecting drug users.*

- Case Study 2.3. Outreach clinics at sex work hotspots: *A cost-effective model of STI service delivery for hard-to-reach FSWs of different typologies.*

- Case Study 2.4. Bar-based clinic services: *Provision of venue-based STI treatment services for women selling sex in dance bars in Mumbai.*

- Case Study 2.5. Broker-based clinics for long-distance truckers: *An intervention to increase STI clinic service uptake among long-distance truckers by strategically positioning outreach clinics at the busiest broker offices at transshipment locations (halt points) across nine states.*

- Case study 2.6. Public-private partnership for delivering STI clinic services to key populations: *A public-private partnership (the "Mythri Mainstreaming Model") between NGOs and government health services for delivery of STI clinical services to key populations.*

- Case Study 2.7. Preferred provider model for widely dispersed rural key populations: *Development of a model of STI service provision by private and government sector medical doctors to increase access for low-density and widely dispersed key populations.*

In Chapter 3, Sexually Transmitted Infections (STI) Care and Treatment, the components of STI case management are presented, including the development of guidelines and tools, training of health care providers, and supportive supervision and quality monitoring. Three cases studies describe the experiences of SLPs in providing STI clinical services.

- Case study 3.1. "Is that all?" Promoting acceptance of preventive STI check-ups: *A campaign to promote acceptance of preventive STI check-ups and internal examinations among key populations.*

- Case study 3.2. Pre-packaged color-coded STI treatment kits to improve syndromic STI management: *Using pre-packaged color-coded STI treatment kits to ensure correct treatment for STI syndromes.*

- Case study 3.3. Syphilis screening campaign using rapid test kits: *Large-scale use of rapid tests to increase uptake of syphilis screening in static and outreach clinic settings.*

Chapter 4, Continuum of Care, describes the provision of health and supportive services beyond STI management, including health awareness activities, treatment of minor illnesses, HIV-related services, tuberculosis screening and treatment, sexual and reproductive health services, and services for PWID. Four case studies are presented.

- Case study 4.1. Master health check-up campaign: *A public sector initiative to motivate key populations to access a range of health services, including STI and HIV services, at government clinics.*

- Case study 4.2. Scaling up HIV testing for key populations: *A public-private partnership with the Government of India for provision of HIV testing and counseling at NGO-run clinics and a demand generation campaign for HIV testing that coincided with scheduled outreach clinic services.*

- Case study 4.3. Verbal screening to improve early detection of tuberculosis: *Early detection and treatment of tuberculosis among key populations through verbal screening and collaboration with government TB services for diagnosis and treatment.*

- Case study 4.4. Meeting the contraceptive needs of female sex workers: *Integration of provider-initiated family planning needs assessment and service provision into HIV/STI clinics for female sex workers.*

Chapter 5, Clinical Management Systems, presents an overview of systems for clinical operations, monitoring and reporting to support the provision of high quality clinic services for key populations. Three case studies present the experiences of SLPs in implementing clinic management systems.

- Case study 5.1. Clinic branding: *An innovative business model of branded clinics for HIV prevention among truckers to improve service utilization and program coverage.*

- "Case study 5.2. Improving the drug supply management system: *Development and implementation of an efficient drug supply and stock management system in a large STI/HIV program.*"

- Case study 5.3. Outsourcing clinic management: *Outsourcing management of clinical services to external health management agencies.*

Chapter 6, Sustainability and Transition, describes the transition of Avahan clinical services to a sustainable government-managed model. Four case studies describe approaches to transition and sustainability, their successes, challenges and lessons learned.

- Case study 6.1. Transition experience: Karnataka: *Transitioning two large projects to Government of India management.*

- Case study 6.2. Transition experience: Tamil Nadu*: Change management process for transitioning the TAI services to Government of India management.*

- Case Study 6.3. Increasing access to STI services at public health facilities for key populations: *A state-level health systems strengthening initiative and community outreach campaign to increase access by key populations jointly planned and implemented by health officials, NGOs and the community.*

- Case study 6.4. Sustaining STI and HIV services for MSM/TG through a public-private partnership: *A longstanding public-private partnership between an NGO and a teaching hospital to provide clinical services for the MSM and transgender communities.*

Introduction

Background

In 2003, the Bill & Melinda Gates Foundation launched a large HIV prevention program called Avahan, the India AIDS Initiative, to help reduce the spread of HIV in India. Avahan provided a standardized package of prevention interventions to key populations at high risk for HIV. The program provided services to female sex workers (FSWs), high-risk men who have sex with men (HR-MSM), transgender people (TG), people who inject drugs (PWID), clients of sex workers in the six Indian states with the highest HIV prevalence, and truckers at halt-points on the national highways. The Avahan intervention districts and sites (shown in *Figure I*) were chosen in conjunction with the National AIDS Control Organization (NACO) to avoid overlap and maximize coverage. By the end of the first phase of Avahan in 2009, the program had reached nearly 221,000 FSWs, 82,000 HR-MSM and TG, 18,000 PWID, and five million men at risk (BMGF 2010a).

The Avahan package of prevention interventions addressed both proximal and distal determinants of HIV risk. Proximal determinants of risk [e.g., presence of sexually transmitted infections (STIs), condom use, type and frequency of sexual activity, and type of partner] were addressed through services such as peer outreach, behavior change communication, condom distribution, syringe and needle exchange, and treatment of STIs. The distal determinants of risk (e.g., stigma, violence, legal environment, medical infrastructure, mobility and migration, and gender roles) were addressed through structural interventions and community mobilization (BMGF 2010a).

The program was implemented in two phases. The first phase of scale-up (2003-2009) was implemented with the help of nine state lead implementing partners (SLPs) working through local non-governmental organizations (NGOs) and community-based organizations (CBOs) to provide services. In the second phase of sustainability (2009-2013), the interventions were transitioned in a phased manner to the Government of India, with additional support from Avahan for capacity building of CBOs.

Provision of clinical services was a large component of the Avahan Common Minimum Program. Services centered around prevention and treatment of STIs, early diagnosis of HIV with referral to HIV care and treatment services, and referrals to other key services related to prevention of HIV/STI and the general health and well-being of the populations served.

FIGURE I. Avahan Intervention Sites for Key Populations (BMGF 2010b)
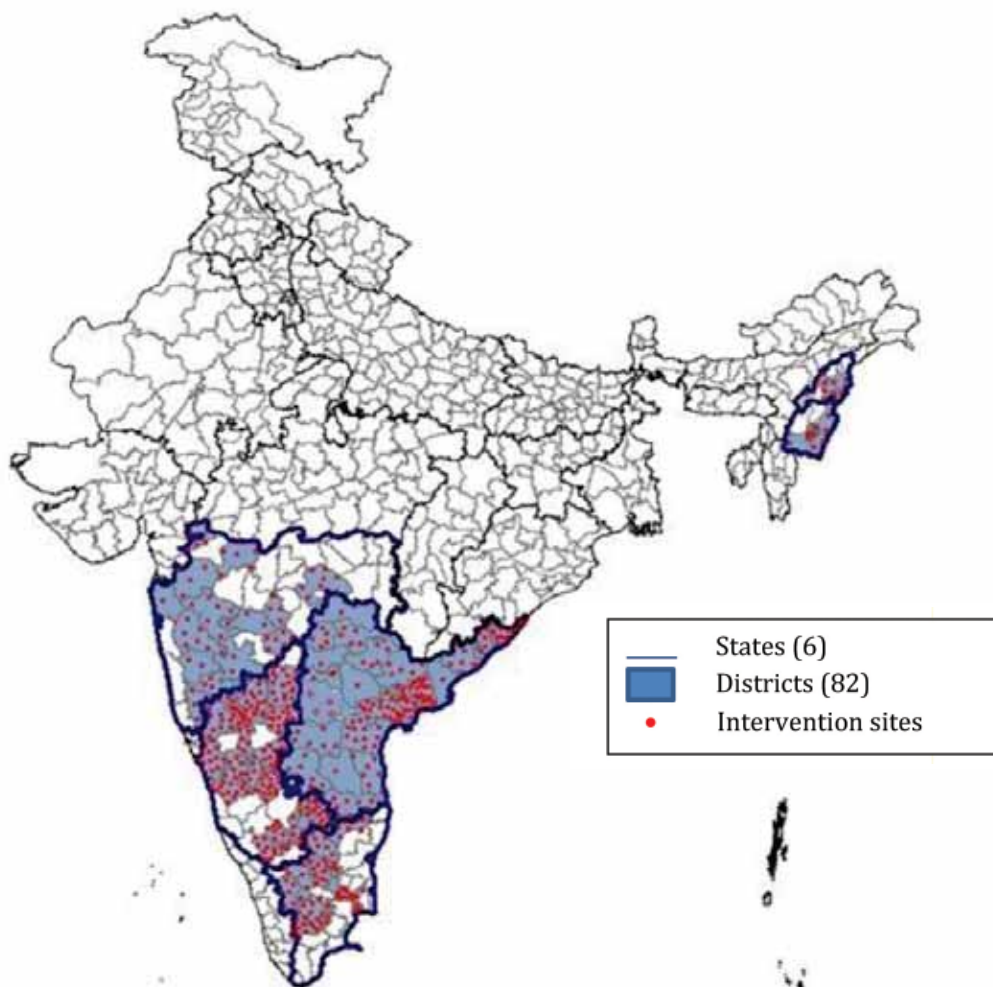
Organization for STI service delivery in Avahan

The organizational structure of Avahan was designed to enable rapid and simultaneous scale-up across geographic areas, facilitate standardization of key elements, and share best practices across all programs, including STI services. Avahan was made up of a collection of state-level projects, each led by SLPs and implemented by local NGOs. The nine SLPs and their projects are described in *Box I*.

Avahan's pyramidal organizational structure for STI service delivery is shown in *Figure II* below. The STI capacity building partner (FHI 360) was responsible for developing standardized guidelines, training of SLPs, regular technical support, monitoring clinic statistics and quality of services. The SLPs trained NGO clinic staff and provided regular supportive supervision. The NGO clinic staff provided STI services in coordination with the outreach team and generated monthly reports. The NGO outreach staff and peer outreach workers raised community awareness on STIs and motivated key population members to attend the clinic for STI symptoms and regular screening. Community members participated as members of the local clinic committees and advisory groups. Additional community roles included conducting community-led outreach, assisting in the clinic, and holding paid clinic staff positions.

FIGURE II. Avahan organization for STI service delivery (BMGF 2010b)

STI Capacity Building Partner

Pan-Avahan
Develop Guidelines and Standards
Operational Research
Cross-learning

Lead Partner Level
Train and support STI coordinators of lead partners
Regular technical support
Monitor outcomes from program data (clinic visits, syndromes)

State-level Strategy
District-level Planning
Hotspot-level implementation
Individual-level Tracking

9 lead partners

Lead partners
• Train and support NGO clinic staff
• Supervision based on standard quality monitoring tools

128 grassroots Indian NGOs/CBOs

NGO clinic staff:
• Provide STI services
• Coordinate with outreach efforts
• Report service statistics

7800 peer outreach workers and staff supervisors

Peer outreach workers and staff supervisors:
• Follow-up with community on STI

321,000
Female Sex Workers
High Risk Men Who Have Sex with Men
Injecting Drug Users
Members of Core Groups
5,000,000 Men At Risk Receiving Services

Community members:
• Participate on clinic committee

Other capacity building, advocacy, monitoring and evaluation, knowledge building

Box I.
Avahan state lead partners and projects

Emmanuel Hospital Association and the Australian International Health Institute of the University of Melbourne – Project ORCHID (Organised Response for Comprehensive HIV Interventions in selected high prevalence Districts)
Location: 11 districts of Manipur and Nagaland (Northeast India)
Target population: 10,550 PWID, 3,000 FSWs and 1,450 HR-MSM

FHI 360 – Aastha Project
Location: Mumbai and Thane districts of Maharashtra (South India)
Target population: 3,400 male sex workers/TG and 35,000 FSWs in a variety of venues, including brothels, lodges, hotels, street pick-up spots, and bars

Hindustan Latex Family Planning Promotion Trust (HLFPPT) – Swagati and Nestam Projects
Location: Andhra Pradesh (South India)
Target population: Over 35,000 FSWs, HR-MSM and TG

India HIV/AIDS Alliance
Location: Rayalseema and Telangana regions (14 districts) of Andhra Pradesh (South India)
Target population: 46,600 FSWs and 21,250 HR-MSM/TG

Karnataka Health Promotion Trust (KHPT)
Sankalp Project
Location: 18 districts of Karnataka (South India)
Target population: 64,000 FSWs and 21,000 HR-MSM/TG
Corridors Project
Location: Maharashtra and Karnataka (South India) – border districts of Bagalkot, Belgaum and Bijapur in Karnataka, and Sangli, Satara and Solapur in Maharashtra
Target population: 5,040 FSWs and 1,900 HR-MSM who move back and forth along a "corridor" from rural northern Karnataka to urban southern Maharashtra and onwards to Pune and Mumbai

Pathfinder International – Mukta Project
Location: 10 Districts of Maharashtra (South India)
Target population: 14,000 FSWs, 6,000 HR-MSM and TG

Population Services International (PSI)
Location: across 100 cities and large towns in the four southern states
Target population: Men at risk in commercial sex settings

Transport Corporation of India Foundation (TCIF) – Project Kavach
Location: Along truck halt-points of major highways in nine states of India
Target population: Approximately 800,000 long-distance truckers

Voluntary Health Services (VHS) – Tamil Nadu AIDS Initiative (TAI)
Location: 13 high prevalence districts of Tamil Nadu (South India)
Target population: 34,350 FSWs and 14,800 HR-MSM/TG

Box II.
Guiding principles for Avahan's provision of clinical prevention services (BMGF 2010a)

- The STI control strategy includes both treatment and prevention, encouraging adherence and partner treatment, and avoiding re-infection.

- The STI treatment guidelines adhere to the national guidelines, incorporating global best practices.

- Services to key populations are established in easily accessible locations based on key population input and address stigmatization and confidentiality issues.

- In order to increase clinic attendance, services for basic primary health care and for early HIV infection management are provided. Other necessary clinical services are provided through linkages.

- Systems are established to monitor quality of clinical, laboratory, and counseling services.

- Prevention commodities, STI drugs, male latex condoms, and needles and syringes are available (free to FSWs, MSM/TG and PWID, and for a fee to men at risk, such as long-distance truck drivers and clients of female sex workers).

- Individuals from key populations are involved, as far as possible, in aspects of service delivery and management of program-owned clinics, and in monitoring of all clinical services in order to increase acceptability and accessibility.

Guidelines and recommendations

Two key Avahan documents guided the development and scale-up of clinical and support services across the states in India. The *Avahan Common Minimum Program* outlines the guiding principles and program descriptions of the six Avahan program areas, including clinical prevention services

Box III.

WHO Recommendations: *Prevention and Treatment of HIV and Other Sexually Transmitted Infections for Sex Workers in Low- and Middle-income Countries* **(WHO 2012)**

Good practice recommendations:

1. All countries should work toward decriminalization of sex work and elimination orkers.

2. Governments should establish antidiscrimination and other rights-respecting laws to protect against discrimination and violence, and other violations of rights faced by sex workers in order to realize their human rights and reduce their vulnerability to HIV infection and the impact of AIDS. Antidiscrimination laws and regulations should guarantee sex workers' right to social, health and financial services.

3. Health services should be made available, accessible and acceptable to sex workers based on the principles of avoidance of stigma, non-discrimination and the right to health.

4. Violence against sex workers is a risk factor for HIV and must be prevented and addressed in partnership with sex workers and sex worker led organizations.

Evidence-based recommendations:

1. Offer a package of interventions to enhance community empowerment among sex workers.

2. Promote correct and consistent condom use among sex workers and their clients.

3. Offer periodic screening for asymptomatic STIs to FSWs.

4. Offer FSWs, in settings with high prevalence and limited clinical services, periodic presumptive treatment for asymptomatic STIs.

5. Offer voluntary HIV testing and counseling to sex workers.

6. Use the current WHO guidance on the use of antiretroviral therapy for HIV infection in adults and adolescents for sex workers living with HIV.

7. Use the current WHO recommendations on harm reduction for sex workers who inject drugs.

8. Include sex workers as targets of catch-up hepatitis B vaccine immunization strategies in settings where infant immunization has not reached full coverage.

(shown in *Box II*) (BMGF 2010a). In addition, Avahan *Clinic Operational Guidelines and Standards* were developed early in the program implementation (FHI 2007). The detailed document, often referred to as "the *COGS*," contains guidelines and standard operating procedures for all aspects of clinic management, including clinic operations (e.g., community-led approaches, staffing, training, equipment); STI management tailored to key populations; laboratory services; infection control and waste management; education and counseling; ethics and confidentiality; monitoring and evaluation; and technical support and supervision. The COGS was recognized as a valuable tool by the Government of India and was later adapted for the national STI operational guidelines.

More recently, technical recommendations for effective interventions for the prevention and treatment of HIV and STIs among sex workers were released in 2012 by the World Health Organization (WHO), the United Nations Population Fund (UNFPA), the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the Global Network of Sex Work Projects (NSWP) (WHO 2012). These global guidelines cover the broad scope of sex worker interventions, including sex worker empowerment, community outreach and prevention, and clinical services. The guidelines include two types of recommendations: those based on evidence (i.e., following the GRADE methodology) and good practice recommendations (i.e., based on common sense, ethics and human rights principles). The recommendations are shown in *Box III*. The guidelines also outline guiding principles for implementing comprehensive HIV and STI programs with sex workers, which include community empowerment, community participation and leadership, addressing structural barriers, operating at multiple levels from the front line to national policy, and providing services that cover the full range of sex worker needs in a complementary fashion to existing services with strong referral linkages.

A follow-up implementation guide with practical advice on planning HIV and STI programs and services for sex workers was released the following year (WHO 2013a). The six sections of the guide detail the components of implementing activities for community empowerment, addressing violence against sex workers, community-led services, condom and lubricant programming, clinical and support services, and program management and capacity building.

Purpose

During the Avahan program, many innovative approaches to providing clinical services tailored to the specific needs of key populations were developed and tested in India. The STI capacity building partner was responsible for disseminating the learnings to SLPs and key population programs in India supported by other donors. The purpose of this document is to share good practices and lessons learned.

The objective of this publication is to strengthen the capacity of implementers to deliver high quality STI clinical and support services to key populations and their sexual partners. Although the case studies featured in this publication arise from an Indian context, they can be adapted for application throughout the Asian region, as well as globally.

The primary audience for this publication is program and technical officers responsible for planning and implementing STI clinical and support services for key populations at risk of HIV in resource-constrained settings. It is also recommended for use by national, regional, and state public health officials, as well as donors, policy-makers and advocacy managers associated with delivery of STI clinical services for FSWs, HR-MSM, TG, PWID, and their sexual partners.

Through presentation of detailed case studies, this publication offers practical advice for implementing the clinical service component of HIV/ STI programs for key populations and at risk men, including managing operational issues and overcoming challenges that arise during planning and implementation of services. Recommendations from previously published guidelines are summarized and case studies illustrate the real-world experience of implementing them in the field.

Although these case studies focus on clinic-based services, they are presented with the understanding that the clinical services are provided within a broader package of community empowerment interventions. Community-led interventions enhance the effectiveness of clinical services by addressing structural barriers and promoting an enabling environment.

## Case study selection and documentation

The case studies were selected and developed through workshops and a series of consultations with program and technical officers from the SLPs of Avahan, STI technical experts, and FHI 360. All Avahan SLPs were asked to identify and document good practices that fit within a provided list of thematic areas. Proposed case studies were reviewed by a steering committee made up of representatives of SLPs, Bill & Melinda Gates Foundation, and consultants. For each thematic area, the steering committee recommended program interventions for inclusion after assessing them according to a standard set of criteria in the following areas:

- Replicability and scalability: The intervention approach was replicated at a different site, preferably under different conditions and was either successfully taken to scale or is considered to have the potential to do so.

- Outcome: The intervention demonstrated improved outcomes (as shown by quantitative and/or qualitative data).

- Process: The development of the intervention was simple and straightforward, and could easily be explained to implementers in a different environment.

- Acceptability and accessibility: The intervention resulted in improved access to services by key populations.

After selection of good practices, additional details were obtained through document review and interviews with the SLPs to finalize the case studies for inclusion in this publication.

How to use this publication

In each chapter of this publication, the relevant guidelines and recommendations from the sources listed above are summarized, followed by lessons learned from the Indian experience and presentation of detailed case studies. The case studies provide practical advice in selected areas of clinical services based on the availability of suitable case studies and is not intended to be a comprehensive guide. Readers will benefit from consulting the guidelines listed above, as well as other sources for additional aspects of clinical service provision and other essential components of programs for key populations at risk of HIV, such as HIV care and treatment, community outreach, community empowerment, structural interventions, program management, and organizational capacity building.
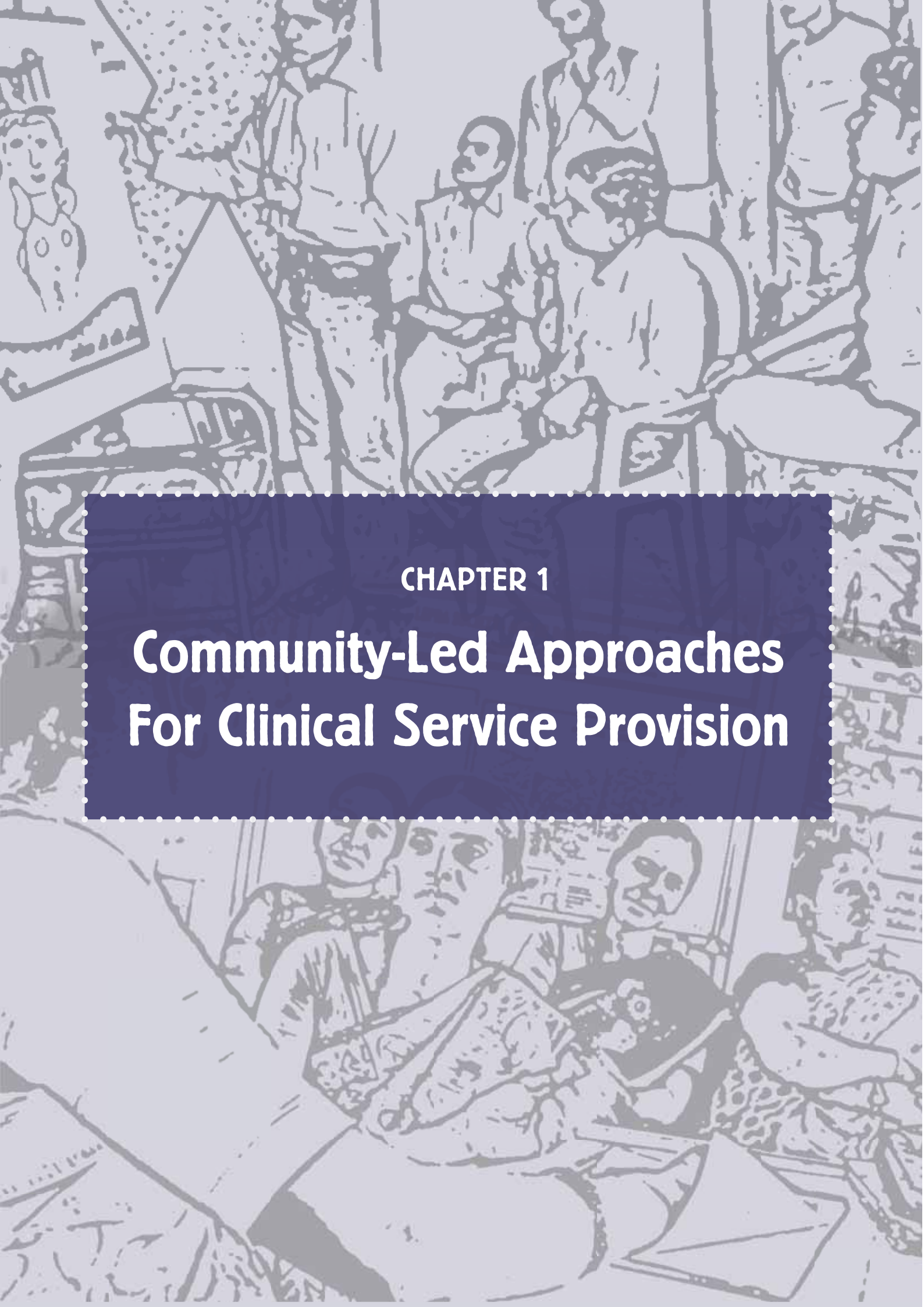
CHAPTER 1

Community-Led Approaches For Clinical Service Provision

Chapter 1

Community-Led Approaches For Clinical Service Provision

A community-led approach ensures that community members take the lead in designing, implementing and managing interventions. Although HIV prevention interventions are usually initiated by NGOs in the early phases of a program, active engagement with and capacity building of the community can gradually increase community involvement over time and build community ownership and responsibility for the programs and services. Programs shift from being delivered to and for the community to being conducted with and by the community. And when programs are owned and managed by the community, they are more acceptable to the community members and can more directly address structural barriers.

India has an extensive history of successful participatory development approaches, ranging from longstanding production cooperatives to large self-help group movements. The Sonagachi project in Kolkata, West Bengal is a globally recognized model of a community-led sex worker intervention resulting in both HIV risk reduction and improved social outcomes. Drawing on these experiences, the Avahan program emphasized community involvement in planning, operating and monitoring of clinical services from the outset. A section on community-led approaches was included in the *Clinic Operational Guidelines and Standards (COGS)* for Avahan clinics, which was developed early in the project. Community participation was one of the important strategies used to address barriers to coverage and uptake of clinic services. In addition to peer outreach workers who received an honorarium for their services, community volunteers (such as the members of clinic committees described in the case studies) were involved in awareness-building and promoting clinic services. An engaged, mobilized community was essential to Avahan's overall success and to its ability to expand services and respond to the changing funding and policy environment (e.g., transitioning clinics to government support) over time (Dallabetta et al, 2014).

Community involvement increases clinic utilization

Several studies support the role of community involvement in health seeking behavior. In the early years of the Avahan program, higher clinic utilization rates were seen in communities with more active involvement of key populations (KPs) in both outreach and clinic activities, and where there was good coordination and interaction of clinic and outreach staff (Steen et al. 2006). Avahan STI clinics deliberately and progressively engaged the communities and increased their involvement in clinic management with a concomitant increase in clinic attendance among female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and people who inject drugs (PWID), and decrease in the number of STI syndromes detected (*see Figure 1.1*) (Wheeler et al. 2012). Collectivization among FSWs has also been shown to be associated with increased clinical service utilization at government health facilities in Andhra Pradesh (*see Box 1.1*) (Saggurti et al. 2013).

The findings of these and other studies, underscore the importance of community participation to inform, scale up and improve utilization of clinical services by KPs. Building and fostering a mobilized community is essential for the success of programs. By establishing structures and mechanisms for meaningful engagement, the community can support the program by assisting in problem-solving; providing critical inputs pertaining to challenges with clinic access and utilization; disseminating accurate information and correcting misconceptions; developing and supporting community norms for adherence and regular HIV testing; assisting in service delivery; and organizing to address issues of stigma, discrimination and violence.

FIGURE 1.1. Trends in KPs attending Avahan-supported clinics
(symptomatic visits and routine medical check-ups) plotted against an index of community involvement in the clinic (Wheeler et al. 2012)
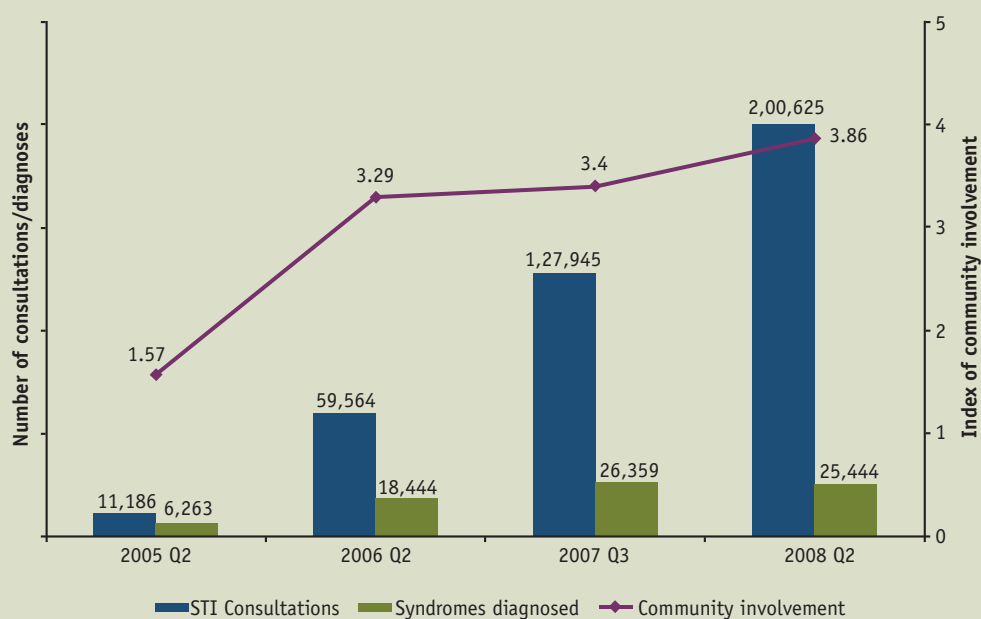
Box 1.1.
Outcomes of community collectivization in Andhra Pradesh (Saggurti et al. 2013)

Over the last decade, studies around the world have demonstrated the importance of community mobilization in HIV prevention programs; however, more data are needed to understand how it contributes to the HIV/AIDS response in India, particularly in increasing knowledge, promoting safer sexual behaviors, and influencing the self-efficacy of key populations. A recent study carried out an analysis of the degree of collectivization among FSWs and HR-MSM/TG in the state of Andhra Pradesh and its association with individuals' utilization of government health centers for STI treatment and self-efficacy for service utilization of government health facilities. The study utilized data from the Behavioral Tracking Survey, a cross-sectional behavioral survey conducted during 2010-2011 among FSWs and HR-MSM/TG in Andhra Pradesh to monitor key components of the Avahan program, including community mobilization, safer sex practices, and STI treatment seeking behaviors. FSWs and HR-MSM/TG were recruited from nine and six districts, respectively. The sample size for both groups was 400 completed interviews per district. The community mobilization and associated indicators were defined as:

- *Collective efficacy* (both FSWs and HR-MSM/TG): Belief of the community in its power to work together to effect positive change.

- *Collective agency* (FSWs only): Choice, control or powers that marginalized groups have to act for themselves to claim their rights and hold others accountable for these rights.

- *Collective action* (FSWs only): Strategic and organized activities by mobilized community members to increase the community's visibility in wider society and present or enact its agenda for change.

- *Participation in public events* (HR-MSM/TG only): Participated in any public events in the last six months, despite risk of being identified as an HR-MSM.

- *STI treatment from government health facilities*: Individual visited any government health facility in the past year for treatment of STI-related symptoms.

- *Self-efficacy for service utilization from government health facilities*: Self-confidence in accessing services from government health facilities despite health care providers knowing that they are FSW/HR-MSM/TG and/or treating them disrespectfully.

The results (*see Table 1.1 below*) showed that among FSWs, indicators of collectivization showed a significant positive association with service utilization from government health facilities. The inconclusive association of collectivization with STI treatment seeking at government health facilities among HR-MSM/TG (*Table 1.2*) suggests the need for addressing structural barriers that deter them from accessing these services.

Table 1.1. Association of collectivization with outcome indicators among FSWs in Andhra Pradesh

Outcome indicators	Collective efficacy		Collective agency		Collective action	
	Low	High	Low	High	Low	High
STI treatment from government health facilities in past year (%)	32.1	59.8	49.9	61.9	59.1	44.3
Self-efficacy for service utilization from government health facilities (%)	37.3	60.5	48.3	67.7	51.9	72.1

Table 1.2. Association of collectivization with outcome indicators among HR-MSM/TG in Andhra Pradesh

Outcome indicators	Collective efficacy		Participation in public events	
	Low	High	No	Yes
STI treatment from government health facilities in past year (%)	42.9	40.5	44.9	40.9
Self-efficacy for service utilization from government health facilities (%)	35.9	66.9	38.0	59.5

Implementation of a community led approach

A specific plan should be developed with strategies and activities designed to progressively involve the community. A phased approach to scale-up and shift from NGO-led to community-led services is shown in *Figure 1.2*. Community participation in STI clinic services should also be included as part of clinic quality monitoring. The Avahan STI capacity building team[1] developed a Clinic Quality Monitoring Tool for assessing clinic performance during routine supportive supervision visits. A brief description of the tool and a retrospective analysis of the data collected is shown in *Box 1.2*.

There are several possible areas for meaningful community involvement and participation in clinical services and support. This chapter focuses on three main areas:

Community-led outreach to increase community access to services: Peer outreach workers are strategically placed to strengthen linkages between the community and the clinic. As part of their regular duties, they accompany community members to the clinic, advocate for community members at the clinic, and explain and demystify clinic procedures. Peer outreach can promote clinic attendance for wellness (routine check-ups), not just when symptomatic. They assist with referrals to HIV testing and counseling and other services, link those testing HIV positive to care, and conduct verbal screening for tuberculosis. Outreach workers also provide feedback on the quality of clinical services and suggest ways to make clinical services more accessible and to increase their regular use by the community.

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[1]The FHI 360 STI capacity building team provided technical support for STI and clinical services to Avahan implementing partners.

Community committees and advisory groups provide a channel of communication between the community and clinical service providers and promote community ownership of programs and services. They help improve the quality of services by providing community feedback. Regular meetings provide an avenue for accountability of clinical services to the community and serve as a forum for troubleshooting problems and mediating disputes.

Appointment of community members to clinic staff positions: Individuals from key population groups should be involved as much as possible in service delivery and management of clinic services. This requires a well-thought out plan that is implemented in parallel with promotion of community empowerment and capacity building. A training and mentoring program is needed to provide the community members who are selected for staff positions with the skills and support to gradually take on their service delivery roles and responsibilities. Attention should also be paid to the expectations of non-community staff. They should be provided with guidance and support as responsibilities are shifted to the newly hired workers from the community. Some options for community-held positions include, but are not limited to: clinic administration (clinic manager, clinic assistant, patient registration and record-keeping), maintenance of clinic equipment and logistics, and peer counselors. With additional formal training, community members have also been hired as nurses and social workers in program clinics (WHO 2013). Community members should receive a fair wage for their work when they hold staff positions.

FIGURE 1.2. Approach to scale-up of STI services with increasing community engagement (WHO 2013)
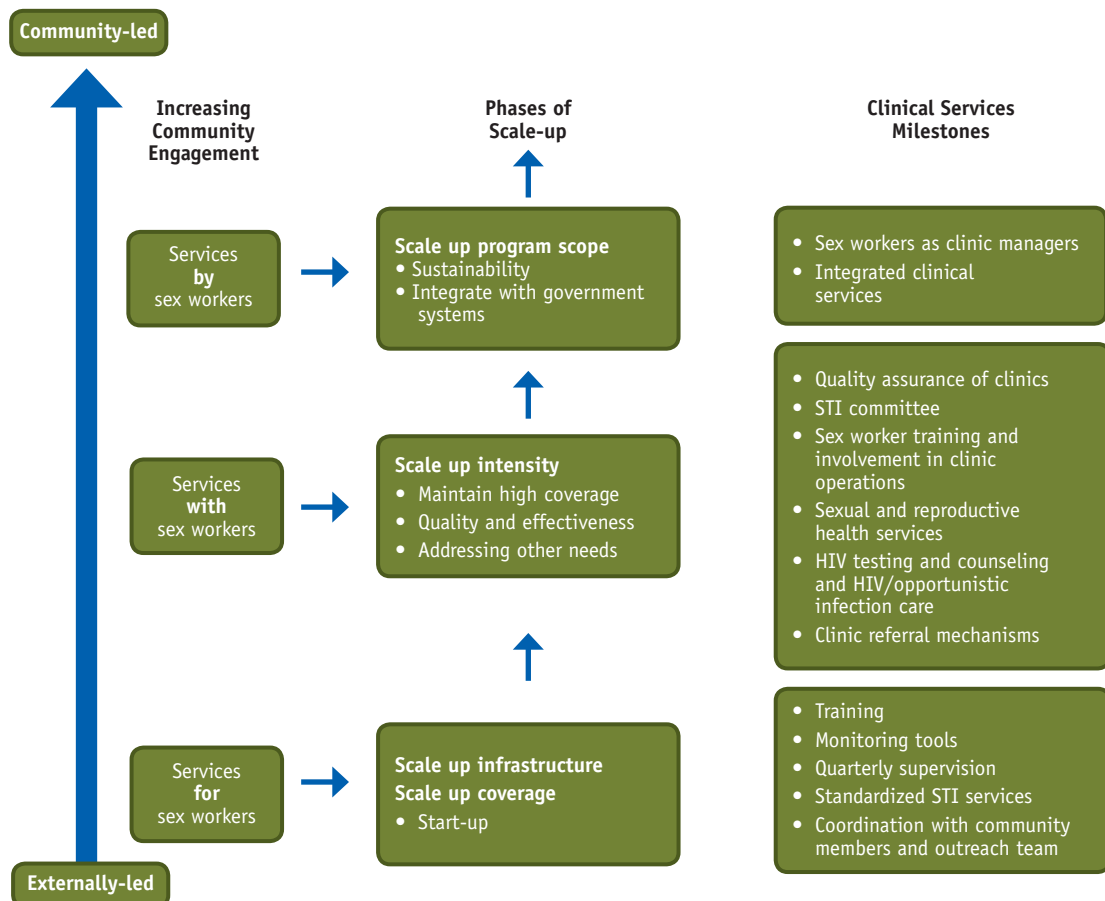
> **Box 1.2.**
>
> ## Quality and uptake of services in Avahan clinics with differing levels of community involvement in promoting STI services (Das et al. 2011).
>
> The Avahan Clinic Quality Monitoring Tool included a scoring system for community participation in clinic services, service statistics and quality of services. The five sub-indicators for community participation were promotion of STI services by peer outreach workers, community member(s) as clinic staff, community management of drop-in center (DIC), regular meetings between clinic and outreach staff, and a functional community monitoring system (such as a clinic committee). A retrospective analysis of the Clinic Quality Monitoring Tool scores of a random sample of 158 clinics visited by the STI Capacity Building team during 2008-2011 was undertaken to assess if higher scores for community participation were associated with improved service uptake and quality of services. The results showed that clinics with better community participation scores also had significantly higher scores for ethical standards, tuberculosis services and documentation. These clinics also had a higher proportion of registered KPs undergoing regular STI check-ups and syphilis screening, but the differences were not significant.

> **Box 1.3**
>
> ## Community mobilization empowers FSWs in Karnataka to negotiate better condom use and access services (Beattie et al. 2014)
>
> Data collected through bio-behavioral surveys conducted in 2008 and 2011 among FSWs in four districts of Karnataka was analyzed to examine the impact of community mobilization on the empowerment, risk behaviors and STI/HIV prevalence. Exposure to community mobilization was classified as low (attended NGO meetings or drop-in centers) or high (member of collective or peer groups). FSWs with high exposure to community mobilization were more likely to have been tested for HIV and to have used a condom at last sex with occasional clients, repeat clients and regular partners; and were less likely to be infected with gonorrhea and chlamydia as compared to those with low exposure to community mobilization.

Case studies

The experiences of the capacity building partner which established a learning site and a state lead partner in increasing community participation to develop community-led STI clinical services are described in detail in the following case studies. **Case study 1.1: Clinic management by a sex worker-owned community-based organization**, describes the University of Manitoba's process of community mobilization of female sex workers and management of the clinical services by a sex worker-owned CBO. The project has become a regional learning site. **Case study 1.2: Creating a community empowerment model**, describes a successful transition from an NGO-led project to a

community-led approach by promoting community ownership among sex workers, high-risk men who have sex with men and transgenders.

CASE STUDY 1.1: Clinic management by a sex worker-owned community-based organization (CBO)

This case study describes a process of community mobilization of sex workers that led to community ownership and management of clinic services. This successful project has been recognized as a regional learning site.

Target population: Female, male and transgender sex workers
Location: District Mysore, State of Karnataka, South India
Capacity building partner: University of Manitoba

Background

An HIV prevention program for sex workers in Mysore was initiated with funding from Avahan in 2004. A baseline survey in 2004 identified high HIV prevalence (26%), high rates of STI (syphilis 25%, trichomonas infection 33%, chlamydial infection 11%, gonorrhea 5%) among sex workers in the state (Reza Paul et al. 2008). Reported condom use at last sex with occasional clients was 65%, with repeat clients 53%, and with regular partners 7%.

In Mysore and throughout Karnataka, female sex workers (FSWs) reported poor health and poor health-seeking behaviors, including STI care and treatment. An initial needs assessment identified barriers to access and engagement in health care, including fear of being identified as a sex worker, breaches in confidentiality, general stigma, as well as discrimination by health care workers and in health care settings, and high cost of treatment. During the initial needs assessment, three key concerns were raised by sex workers: police violence, lack of a safe space to congregate (especially during the daytime when there were few or no clients), and health care needs specific to women, such as reproductive tract infections.

The project team addressed all of the three primary concerns raised by the sex workers by taking a rights-based approach with a key focus on: (1) community mobilization and peer-mediated outreach; (2) increased access to and utilization of sexual health services; and (3) creating an enabling environment. Within a year of inception, the community of sex workers formed *Ashodaya Samithi*, a sex workers' collective of female, male and transgender sex workers across six districts of the state with more than 8,000 members; and in 2007 *Disha*, a learning site, was established. *Ashodaya Samithi* adopted a community-led empowerment approach to address the issue of marginalization in order to improve access to and utilization of clinical services. The project was based on the principles of community-led structural interventions, where sex workers were not seen as victims or passive beneficiaries, but as empowered individuals with the right to accessible HIV prevention and care services.

Intervention components

Start-up phase: During the first six weeks of the project, a participatory mapping and enumeration exercise was conducted. Even before the clinic was set-up, any health issues that were brought to the team's notice were addressed either by the physicians in the project team or through accompanied referrals to the government hospital. By the third week of the project about 30-40 community members worked with the project team to identify the location for a drop-in center (DIC), referred to as the "resting room" by the community.

Peer-mediated outreach was established during the next six weeks, which identified and addressed difficulties reported by sex workers, and promoted bonding and a sense of companionship among the community. By the sixth week, the project also began delivering clinical services from the safe space created for key populations (KPs). From the very beginning, the clinic provided STI screening and routine speculum examination and addressed other general ailments. Community leaders promoted speculum exams by demystifying the procedure. Conditions that could not be treated were referred to higher centers through the accompanied referral mechanism.

Advocacy with key stakeholders, such as the police, local government officials, local shopkeepers, clients and partners of sex workers, ran parallel to other activities in the project. A 24-hour crisis response team was also established to assist sex workers during crises.

Approach: The community-led and community-owned functioning of the clinic made the sex workers feel safe and comfortable. They began to call the clinics "*Namma* clinics" (*Namma* means 'Our' in Kannada, the local language). The health services provided by the clinics promoted a positive health image, whereby regular sexual health check-ups connoted 'normal' health maintenance, rather than merely treatment for symptomatic STI. The project's key strategy, loosely modeled after the Sonagachi Project,[2] was to frame health risks, notably HIV and STI, as occupational hazards and empower the sex workers to take control of their own lives and wellness. The project conveyed the importance of this strategy to its members through outreach and peer education. This also helped address the stigma surrounding HIV and STI and reduce the indignity around sex work. The project staff treated sex work as a legitimate profession and also helped build self-esteem of the sex workers.

Sustainability phase – establishment of a sex worker-owned CBO: In 2006, *Ashodaya Samithi* created a Clinic Management Committee which enabled community members to take part in clinic management and administration. Apart from managing a static clinic in their DIC, *Ashodaya* established outreach clinics based on the number and requirements of the sex workers in distant locations. Community members made decisions on location, optimal operational hours and the choice of physician. For example, in one location, the members decided to set-up an evening clinic near the city bus stand to cater to the needs of community members who worked in the evenings; other outreach clinics were established near major sex solicitation zones in the district.

In addition to facilitating community ownership, the Clinic Management Committee was a mechanism to collect and respond to feedback from community members on the physician and other clinical staff, and services delivered through *Namma* Clinics, which included identifying solutions to the problems faced by the clinics in providing services. Apart from making changes to the way the clinics operated, community ownership also helped transform the power dynamics that existed between providers and sex workers in conventional clinics. The feedback provided was discussed with the clinic team in the presence of the Clinic Management Committee board members who made sure that the recommendations were incorporated into the daily functioning of the clinic.

The Clinic Management Committee also managed clinical services including planning and execution of outreach clinics, managing medicine stocks, etc. The core project staff of the University of Manitoba was responsible for providing technical knowledge and demystifying technical jargon

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[2]An HIV prevention project for sex workers in West Bengal, India.

for better understanding by community members. Overall, capacity building primarily through a mentoring process focused on three areas of health care delivery: (a) responding to community feedback, (b) clinic administration and management, and (c) building rapport with providers. Community members were encouraged to build their skills through observation and participation.

The Clinic Management Committee also ran an accompanied referral system where a community member accompanied a fellow member who was referred to government and other centers for various services like HIV testing, antiretroviral therapy (ART), etc. In addition, *Ashodaya* chose sex workers (living with HIV) who were willing to volunteer as mentors/counsels for other sex workers. These sex workers were trained and placed in the hospitals, such as ART centers[3] and Integrated Counseling and Testing Centers (ICTC)[4], and were called "Health Care Navigators" who helped people navigate through the complex system. The navigators went on to become an indispensable part of the ART center. Eventually, the clinic services were expanded to include an integrated Sexual and Reproductive Health (SRH)-HIV/STI clinic.

Building capacities of the community members also helped them to support each other. This also led to the formation of *Ashraya* (meaning 'shelter' in Kannada) in 2008, which was a support group for sex workers who were living with HIV. The organization welcomed both sex workers and non-sex workers who were living with HIV. *Ashraya* not only provided a safe space for HIV-positive people to share their stories and their issues, but also helped to address stigma and discrimination around HIV and AIDS, as well as other needs such as social, economic, emotional and legal rights of people living with HIV (PLHIV). *Ashraya* also ran a care and support home for HIV-positive sex workers.

In 2008, the project was transitioned to a community-based organization operated by the community under the name of *Ashodaya Samithi*.

Implementation challenges

Several factors interfered with sex worker attendance at the clinic and DIC, including violence from different quarters (police, boyfriends, raids by rescue and rehabilitation groups); rumors that spread throughout the community about STI treatments; suspicions about the motives ascribed to the project, etc. drove community members away from the clinic and other project activities. The project also experienced difficulties in getting full-time physicians who were willing to work with the community.

Although provision of all services under one roof eliminated the need to go outside for other health care needs, it sometimes caused alienation and marginalization of the community by the 'outside world.' It also threatened financial sustainability and created the problem of non-integration with the government system by creation of a parallel structure.

Lessons Learned

- By prioritizing community needs from the outset of the project, the core project team was able to convince the community that the clinic was truly '*namma*' or owned by them. This created trust among community members for the services provided in the clinic. Sex workers with

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[3]In order to make treatment more accessible, NACO-supported centers dispensing free antiretroviral drugs were opened in medical colleges, district hospitals and non-profit charitable institutions providing care, support and treatment services to PLHIV. A PLHIV network representative was stationed in each ART center to facilitate access to care and treatment services. ART centers also provided counseling and follow-up on treatment adherence and support through community care centers.

[4]An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center

their newly developed capacities were able to foster a sense of camaraderie among community members where members helped each other during moments of crisis. In addition, it was crucial for project staff and planners to encourage and support community initiatives that extended beyond project imperatives (e.g., clinic services) to include activities that looked at their other needs and the overall welfare of sex workers.

- It was important for the project to: (a) adopt a rights-based approach where sex workers were made aware of their rights, based on their own understanding of their entitlements as sex workers and as individuals; (b) train clinic staff and sensitize them to the needs of the sex workers (particularly in informal chat sessions with the community members attending the clinic); (c) use experiential learning as the primary mode of training community members about running the clinic.

- Capacity building programs were driven by the needs and priorities of the population served by the implementing organizations. It was important to continue to build the capacity of a wide range of community members as the capacity to run the clinic was initially restricted to a select few members. The project highlighted the importance of training new members from the community in order to sustain the gains of the project.

- The referral system established by the Clinic Management Committee helped boost the confidence of the community members to seek services from outside the project.

- Paying attention to small details helped increase participation. For example, the location of the DIC and clinic was at a place where there was a mosque, a temple and a school within a distance of a few meters. Routine advocacy meetings were conducted where a "house owner" who was considered friendly was identified who then would help counter the antipathy that some neighbors had with sex workers.

- Since the project was a community-led initiative, and the process was steered by the community members themselves, challenges were overcome more quickly. The issues of 'comfort' and 'satisfaction' of sex workers were given the highest priority in the project. Sex workers were not treated as passive recipients of services but as those who were able to actively seek and demand services.

- Initiatives like *Ashraya*, a registered organization run by and for HIV-positive sex workers, play an important role in increasing access to HIV care and ART adherence. *Ashraya* rapidly grew rapidly into an organization that fostered solidarity, facilitated mutual support, and empowered sex workers living with HIV.

Outcomes

Two cross-sectional integrated behavioral and biological assessments (IBBAs) among probability-based samples of FSWs were compared to investigate the impact of this intervention on sexual behavior and STI prevalence. The baseline IBBA was conducted in 2004, six months after the start of the project, with a follow-up IBBA two and a half years later in 2006. Reported condom use increased over the period of project implementation with a concomitant reduction in the prevalence of curable STIs. There was a striking increase in condom use between the baseline and follow-up surveys: reported condom use at last sex with occasional clients increased from 65% to 90%; with repeat clients from 53% to 66%; and with regular partners from 7% to 30%. STI prevalence declined over the same time period as shown in *Table 1.3*. HIV prevalence remained

stable overall (26% versus 24%) and declined (33.6% versus 24.0%, p=0.05) among FSWs without a regular partner. Clinic attendance rates increased from 52% to 91.7% in the same period.

Table 1.3. STI prevalence among FSWs at baseline and follow-up (Reza Paul et al. 2008)

Prevalence of STIs	Baseline % (N=429)	Follow-up % (N=425)	P value
High-titer syphilis	14.8	3.1	<0.001
Trichomonas	32.9	14.1	<0.001
Chlamydia	10.8	4.7	0.04
Gonorrhea	5.4	2.4	0.06

Under the National AIDS Control Program Phase IV (NACP-IV), *Ashodaya* is implementing 10 targeted interventions among female, transgender and male sex workers as well as among migrant laborers in different districts of the state.

Ashodaya Samithi, with support from UNFPA, Delhi and the UNAIDS, Regional Support Team, Bangkok, set up Ashodaya Academy, an institution which provided both classroom and on-site support for running HIV prevention programs for most-at-risk populations. The UNFPA project requested *Ashodaya Samithi* to work in two selected districts of Rajasthan to build capacities of sex workers to lead community processes for prevention of HIV as well as treatment for STIs and increase access to care and support services. UNAIDS, in partnership with *Ashodaya Samithi,* also set it up as the 'UNAIDS-ADB-Ashodaya Regional Learning Site' on HIV. The center, which is the Asia Pacific region's first ever learning site on HIV and sex work, works towards improving and developing community-led approaches for the HIV program. It also provided technical assistance to networks and organizations working with KPs and facilitated collaborative work at the regional and country level.

CASE STUDY 1.2: Creating a community empowerment model

This case study describes a community empowerment model that resulted in a paradigm shift from an NGO-led 'targeted intervention' to a community-led HIV prevention program for key populations.

Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG).

Location: Tamil Nadu

Lead partner: Voluntary Health Services, Tamil Nadu AIDS Initiative (TAI)

FIGURE 1.3: Map of Tamil Nadu with TAI project districts

Background

TAI was an HIV prevention project for 49,000 FSWs, HR-MSM and TG in 13 high-HIV prevalence districts [antenatal prevalence >1% (NACO 2003)] in the state of Tamil Nadu. The project began in 2004 and was implemented through the traditional mode of sub-contracting NGOs to provide 'targeted interventions' to key populations (KPs).


● TAI

(Source: TAI project documents)

TAI's eventual aim was to empower community-based organizations (CBOs) of KPs to take over the HIV prevention program from the NGOs. Capacity building of CBOs would be provided to enable them to design, administer, promote and monitor the clinical services. To achieve this, it was imperative that TAI, NGO staff and community members work together for a smooth 'transfer' of control and management of services. This case study describes the incremental stages of community participation and the community structures for clinical services.

Intervention components

TAI adapted the Davidson framework of community planning (Davidson 1998) for gradually increasing community involvement in clinical services. The key activities in the framework areas of inform, consult, participate and empower are depicted in *Figure 1.4*.

FIGURE 1.4. Stages of community involvement in clinical services
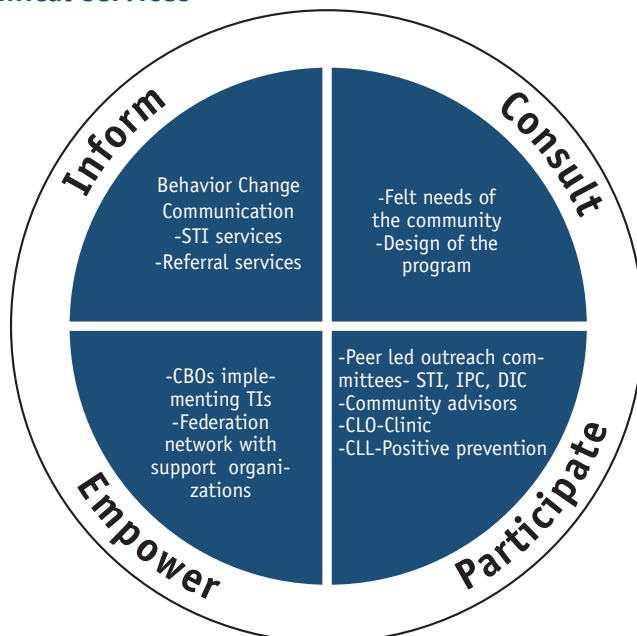
(Source:TAI project documents)

CBOs: Community-based organization. TIs: Targeted Interventions. IPC: Inter personal communication. DIC: Drop-in center. CLO: Community Liaison Officer. CLL: Community Linked Leaders

Information about STIs and related clinic services was disseminated through peer outreach, and at the drop-in center (DIC) and clinic. STI services were delivered through full-time static and satellite clinics. The location of the clinic was decided after community consultations in the form of focus group discussions with community members. The doctors and clinic staff were sensitized to serve the community with empathy. Community representatives assisted in the daily medical and administrative activities of the clinics and DICs, engaged in peer education and outreach activities, and built a supportive environment for those seeking services. They also served as the link between TAI, implementing NGOs and the community to ensure responsiveness to the needs and sensitivities of KPs. CBOs were established and registered, with the ultimate aim of independently providing HIV prevention services to the community. The community organization structure is shown in *Figure 1.5*.

Peer outreach workers formed the backbone of TAI's outreach interventions. They were selected based on their interest to engage in outreach activities, knowing a minimum of 10 to 15 KPs in their social circle, good communication skills, and willingness to work for a stipend. TAI referred to peer outreach workers as "Peer Jeevans." *Jeevan means* "life" in the local language and the title suggests that peer jeevans give a 'new lease of life' to their peers through compassion and care. The responsibilities of peer jeevans included non-health activities such as behavior change communication (BCC), condom promotion, crisis response and developing service maps

FIGURE 1.5. Organizational structure of community participation in TAI
(Note: The structure is for categories of participation only and does not depict the supervisory hierarchy.) (TAI-VHS 2013)
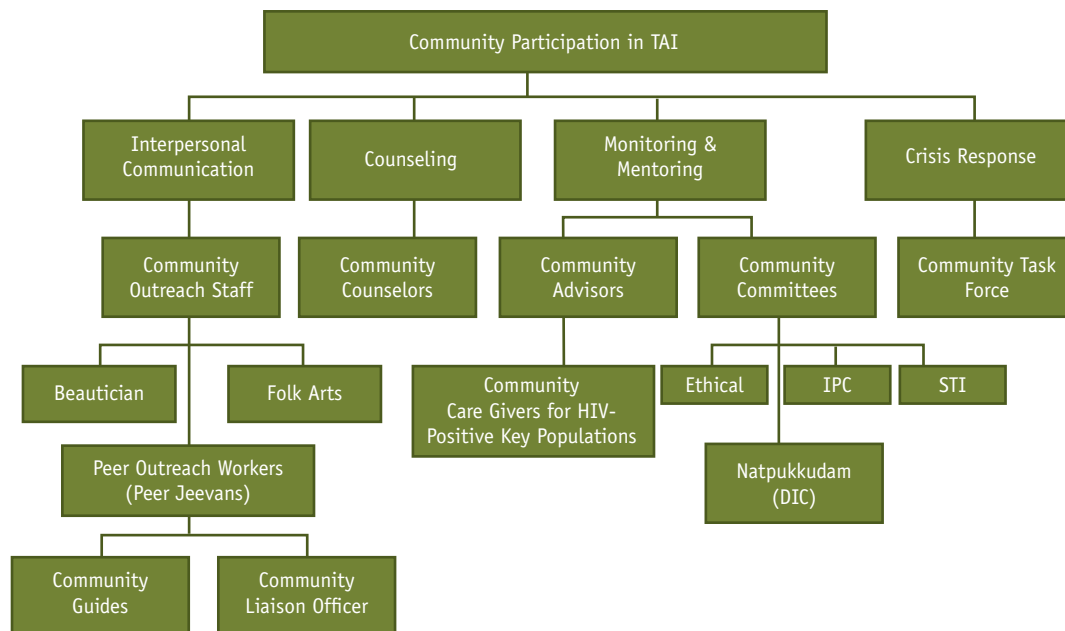
TAI: Tamil Nadu AIDS Initiative. IPC: Inter personal communication. DIC: Drop-in center.

to identify institutions/outlets for legal and social entitlements. The health-related activities included helping KPs access services provided by the NGOs directly and through referrals to other agencies and conducting individual risk assessments and health education for KPs.

Community Liaison Officers (CLOs) were KPs with basic literacy who were motivated to work to support the clinical services of the project. They were paid a stipend and worked both at the clinic and in the field. There was one CLO appointed per static clinic, and s/he worked under the direct supervision of the clinic nurse. The CLO's main job responsibilities were follow-ups in the field for KPs who had never attended or not attended the clinic for long periods and as a nurse assistant. They also accompanied KPs for referrals to HIV testing and counseling or other services. CLOs also served on the "community STI committee" (see below), participated in the NGO review meetings, and provided feedback to community advisors on the clinic services.

Guidelines for duty were created for the CLO and given to all CLOs as handouts. Their working hours were aligned with the clinic operating hours. Each morning, the CLO collected a list of clients who were due for clinic visits (including follow-up STI visits, routine check-ups, or treatment for positive syphilis RPR test results) from the nurse. They went to the field to contact the KPs on their list and reported back to the clinic by 2 pm along with the KPs. In special cases, such as a particular hotspot where a large number of the registered KPs were not accessing clinical services, the CLO would be accompanied on the field visit by the NGO outreach worker or peer jeevan. They spent the rest of the day helping in the clinic with STI drug dispensing and record-keeping. They were trained, mentored and supervised by the nurse and also served as replacements for clinic assistants when required.

The CLOs were trained at regional-level workshops with periodic onsite mentoring.[5] The training module included topic areas such as: Roles and Responsibilities of CLOs; Conducting

[5]Training and on-site mentoring were outsourced. For more information, see **Case study 5.2** for the TAI experience.

Field Visits; Importance of Regular Medical Check-ups and Follow-up Visits; Syphilis (RPR testing and Treatment); Care of People Living with HIV (PLHIV); and tuberculosis. The training content included technical background information on STIs (e.g., symptoms, signs, syndromes, corelation with HIV), basic facts about HIV and AIDS, and condom use. They were also trained on developing work plans and the importance of accompanied referrals.

Community Advisors worked to connect TAI, NGO and the community and ensure better service delivery of all program aspects through planning and regular monitoring. They started as community consultants in the initial phase of the program and a few were later selected as community advisors. Through interactions with community members, the Community Advisors provided inputs to the NGOs and TAI on community needs and community perceptions of the clinical services.

Community Committee Members were elected representatives of the community (1 for every 100 KPs), who could address issues faced by the community and also influence their opinions on health and social empowerment. The Community Committee Members took responsibility for solving the problems of their peers and felt that they were answerable. They worked with NGOs to improve uptake of services and form community collectives. They were involved in monitoring activities, where they identified challenges which were discussed and resolved during the Community Advisors visits and review meetings with TAI.

Clinic Committee: In each clinic, an 'STI committee' was created with three community members on a rotational basis who introduced the services available at the clinic to KPs, provided clarifications, and dispelled myths. They used various IPC materials for dispelling common fears among KPs regarding internal examination and drawing blood. The STI committee members were available at the clinic premises for two to three hours on two days each week. In addition to the STI committee, TAI also formed other community committees (e.g., DIC, Ethical, and IPC committees).

Community Based Organizations (CBOs): TAI facilitated sustainable community movement and promoted community ownership by initiating collectivization efforts. Different collectives were formed such as a Key Population (KP) Collective, Peer outreach workers Collective and Community Committee Members Collective. Community members were collectivized at the hotspot, block (*taluk* level), district and state level. Large community gatherings such as KP conventions and peer jeevan conventions were held at the district and state levels for sharing experiences and solidarity. These gatherings helped in disseminating messages regarding outreach services to a larger audience. This led to the formation of registered CBOs and their federation. The federations were staffed by CBO representatives and met at regular intervals to discuss state-specific issues for KP programming. TAI and the NGOs worked together to build the administrative and financial management capacity of the CBOs so they could independently run the HIV prevention program at a later stage with funding from donor agencies such as the Department of AIDS Control. This was achieved through a series of training workshops, hand-holding and experiential learning as the NGOs gradually handed over various program components to the CBOs.

Implementation challenges

TAI was able to develop a community-led and owned model by the end of the project. However, many challenges were encountered in the shift from a conventional targeted intervention approach to a community-led approach:

- Creating the community structures, gaining the confidence of the community, and convincing them to take on different roles in the program with eventual ownership of services was a gradual and slow process. One of the ways of addressing this issue was by giving community advisors a major role in monitoring performance of the NGOs. It was quite a shift for community members to see a peer-led approach replacing the top-down approach of external implementing agencies. They were convinced about the model once they started seeing visible changes in the lives of their peers.

- The community-led approach encountered resistance from people who were not part of the community, especially in the initial stages. Empowering sex workers went against the accepted beliefs and approaches of mainstream society and some special interest and civil society groups. Increasing community participation in an incremental fashion caused less reaction, while empowering the community to bargain for better services and conditions.

- Capacity building of NGO and CBO staff was a challenge, especially in terms of sustaining the activity and ensuring its quality over an extended period. TAI staff met frequently with the NGOs and CBOs over the course of the project to provide guidance in the development of the community-led program.

Lessons Learned

- The process of involving the community and giving them a larger role in the program led to objections from a few NGOs in the initial stages. Taking the process of development of community ownership to scale requires a sound understanding of the power dynamics among the stakeholders at the societal, program and community levels.

- The implementing agencies need to be flexible to changes inherent to a community led model.

- It was important for TAI to accept and incorporate the felt needs and demands of the community in the program design.

Outcomes

During the development of the community led program, 23 district-level FSW and MSM-run CBOs were registered with the state government. Of these, 14 received direct funding support from NACO to provide HIV prevention services to KPs in the second phase of the Avahan program. The remaining nine CBOs continued to provide services in partnership with NGOs, and TAI continues to build their capacity to apply for grants in the future. All 23 CBOs continue to receive a grant from TAI for social protection of the community.

The TAI program successfully demonstrated the development and implementation of a community empowerment model. It resulted not only in program ownership but also sustained community empowerment through the CBOs and other community organization structures with a resultant increase in utilization of clinical services.
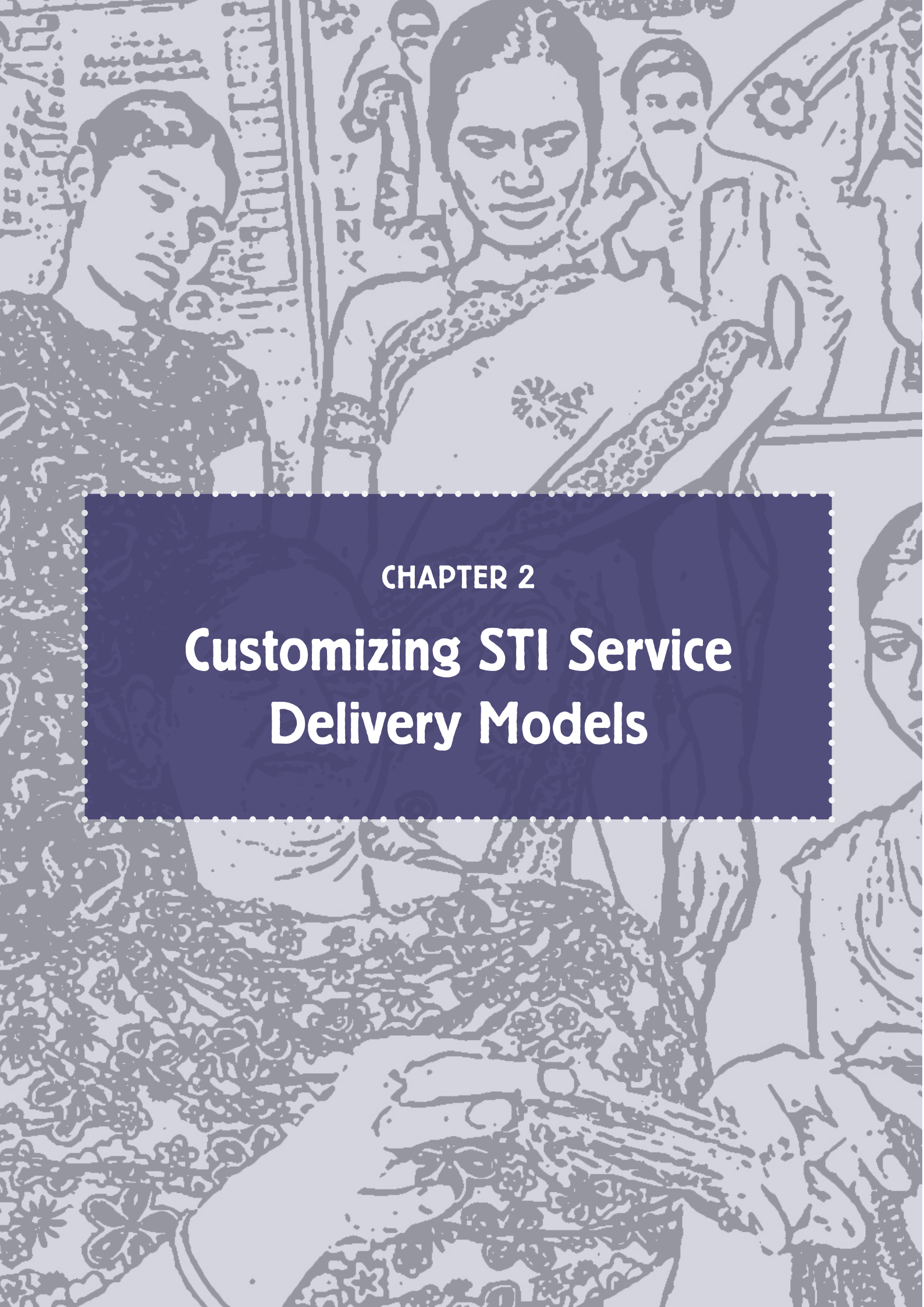
CHAPTER 2

Customizing STI Service Delivery Models

Chapter 2

Customizing STI Service Delivery Models

Reaching and meeting the needs of key populations (KPs) requires customized STI service delivery models. Health care services designed for the general population usually do not successfully address the needs of female sex workers (FSWs), high-risk men who have sex with men (HR-MSM), transgenders (TG) and people who inject drugs (PWID). Health care providers are not trained in prevention messages and management of STIs in these populations and therefore often do not understand or respond to the challenges of high-risk exposure to multiple STIs, anal intercourse, hormonal treatments, and drug use (injecting and non-injecting). In addition, KPs often do not access general health care facilities due to stigma and discrimination from both health care providers and other patients.

Customized service delivery models provide STI services that are tailored to meet the needs of the community. Six overarching operational principles for clinical service delivery are recommended to build trust between clinic staff and KPs (WHO 2013). Services should be:

1. **Voluntary with informed consent**: KPs should be fully informed of procedures and treatments and give consent before they are carried out. Health care providers need to respect a patient's choice if he/she refuses a procedure and/or treatment.

2. **Confidential**: All patient information should be kept confidential and patient privacy should be maintained. This may involve assignment of identification numbers in situations where community members do not want to share their names, addresses or other official information.

3. **Appropriate**: Clinical services should address the needs of the community and be based on international and national standards and guidelines.

4. **Accessible**: Clinic times and locations should provide discreet services that match the work and lifestyles of the community.

5. **Acceptable**: Health care providers should be trained to understand the needs of the community and treat them with respect and a non-judgmental attitude. Establishing a welcoming atmosphere for community members is important.

6. **Affordable**: Clinical services should be affordable and/or free.

The importance of STI clinical services can be actively promoted during outreach and clinic staff interactions with clients. Regular check-ups can be presented as part of a package of "wellness care" to maintain a positive and caring focus. Maintaining the quality of services is a shared responsibility of the clinic staff and the community. The role of quality assurance is explained more in Chapter 3, while the role of the community clinic oversight committee is explained in Chapter 1.

Four models of clinic service provision have been described, each with advantages and disadvantages (see *Table 2.1*) (WHO 2013a). All four models were adapted for use in sites throughout the Avahan project to maximize accessibility to STI services. The selection of the service model depended on the local conditions, typology and density of the KPs.

- *Static clinics* were staffed and managed by the NGOs. They were usually co-located with drop-in centers (DIC), which were managed by community groups (the DIC committee). Various activities were conducted periodically at the DIC, such as awareness sessions on health and other issues of concern to KPs, meetings of local community groups (e.g., STI clinic committee) and celebration of local festivals. The DIC was a safe space where KPs could relax during non-peak business hours, bathe, watch television or simply chat. These services created an informal and home-like environment and some DICs also provided personal grooming services and vocational training to provide added incentives for KPs to attend regularly. Once KPs were at the DIC, they were more likely to access the on-site clinical services.

- *Outreach clinics* included satellite (fixed location) clinics, mobile clinics and health camps run by the NGOs, usually affiliated with a clinic. The outreach clinics were conducted periodically by clinic staff (usually from the static clinic) on predetermined days. The schedule was decided with inputs from local community members. Satellite clinics had a fixed location, such as a sub-DIC or a private medical practitioner's clinic. Health camps did not have a fixed location and were conducted at different locations identified by the community, such as community centers or peer outreach workers' homes. Mobile clinics (usually in vans) were used for providing services for hard-to-reach and dispersed populations such as street-based sex workers.

- *Preferred providers* were local private practitioners who had previously been providing general health services to KPs and had earned their trust, and were identified as 'preferred' by the community. The preferred providers were trained in the management of the health needs of KPs, with particular reference to STIs and HIV prevention, and paid to provide services on a per-client basis by the NGOs.

- *Government clinics* provided services tailored to KPs, usually with the support of NGOs that provided supplies (e.g., STI drugs and condoms) and/or trained staff during specific hours set aside for KP service delivery. The degree of NGO support varied from simple promotion and referral to services to more substantial support in the form of training and honorariums for government physicians providing services after regular work hours similar to a preferred provider approach.

The models, informed with input from the community, often established flexible timings to meet community needs. For example, health camps were held in the evenings and during festivals, preferred providers often worked evenings, and services in bar-based settings were scheduled just before work hours began.

Cost considerations

When selecting a service delivery model, it is necessary to balance access to STI services with the cost associated with each type of model. In general, stand-alone and outreach clinics can provide services closely tailored to the needs of KPs with opportunities for involving the community in service provision, with higher costs. On the other end of the spectrum, preferred providers and government-owned clinics are more sustainable, but may not be as acceptable to the community (see *Table 2.1*).

Other factors contribute to cost. For example, the cost per patient depends on the volume of service. A study comparing the cost and performance of Avahan STI service delivery models (NGO-run static clinic with outreach clinics/health camps versus preferred providers) found that for larger NGOs (providing services to 2,000-3,000 FSWs/HR-MSM), a combination of static clinics and health camps was the most cost-effective model. While static clinics had higher fixed costs than contracting out to preferred providers, a higher volume of service offset the added cost (Delhikar et al. 2013).

Table 2.1. Advantages and disadvantages of STI clinic models (WHO 2013a)

Clinic model	Advantages	Disadvantages
Government-owned clinics *(STI clinics or integrated with other services)*	• Sustainable • Technically efficient services if staff are well-trained and facilities are available	• May not be acceptable and accessible to communities • Strong links with NGO- and community-led outreach services are needed
Preferred providers *(private practitioners)*	• Acceptable to the community • Cost-effective, especially in areas with few community members • Sustainable	• May not provide comprehensive services • Quality monitoring and reporting may not be possible
Outreach clinics *(NGO-run satellite clinics in fixed locations, mobile vans, health camps)*	• Improved access for hard-to-reach populations • Acceptable and accessible • Cost-effective for hard-to-reach populations	• Provision of comprehensive services may not be possible • Variable quality of services
Static stand-alone NGO-run clinics *(full-time services in a fixed location)*	• Technically efficient • Can provide comprehensive services • Can address needs of community members • Can link to safe space (drop-in center) • Allows involvement of community members in clinic operations • Well-suited to areas with a high concentration of KPs	• Higher cost, especially if low number accessing services • Stigma may be associated with accessing the clinic • May be difficult to sustain

As service delivery was transitioned to the Government of India in the second phase of the Avahan program, and donor program components were aligned with the government services, funding for project-owned STI services was limited to those NGOs providing services to more than 1,000 FSWs/HR-MSM or 400 PWID. This necessitated a re-structuring of service delivery models and funding for most project-owned STI services was discontinued because they did not meet the minimum target population. For smaller NGOs, STI management and other clinical services were transitioned to preferred providers or government clinics. A detailed description of the differences in costing and operational guidelines between the Avahan- and government-supported programs and the pre-transition activities for alignment are given later in Chapter 6 (Sustainability and Transition).

Case Studies

The implementation of the four types of STI service delivery models is illustrated in the following case studies. During the initial scale-up phase of Avahan and in later phases in areas with a high concentration of KPs, 'project-owned' clinics (usually a static clinic with associated outreach services) were the most common model. A two-part case study from Project ORCHID in North East India describes how this model was tailored to the local conditions. In **Case Study 2.1: Nurse-led STI management,** trained nurses provided clinical services to scale up services for FSWs and PWID users to overcome the limitations to access to services due to the shortage of doctors, especially in rural areas. A second case study, **Case Study 2.2: Reaching female injecting drug users**, describes the process of designing and implementing services specifically customized to increase utilization by female injecting drug users.

Outreach services in locations tailored to the needs of specific populations are described in the next three case studies: **Case Study 2.3: Outreach clinics at sex work hotspots** describes a cost-effective model of STI service delivery for different typologies of female sex workers at hotspots along an interstate migration corridor the Solapur district of Maharashtra; **Case Study 2.4: Bar-based clinic services** provided venue-based STI treatment services to women selling sex in dance bars in Mumbai; **Case Study 2.5: Broker-based clinics for long-distance truckers** provided clinical services at the busiest brokers' offices at transshipment locations (halt points) along national highways in nine states.

In the second phase of the Avahan project, most clinical services were transitioned to government clinics and preferred providers.

Key populations did not trust government health services, having faced stigma and discrimination, unsuitable clinic timings, long waiting periods and a perceived lack of confidentiality and privacy in the past. To address these issues, the STI Capacity Building Project staff developed a training module to sensitize public sector health care providers to the health needs of key populations, and several rounds of training were conducted across Avahan. The experience of a successful transition to government-owned clinics is described in the case study entitled **Case study 2.6: Public-private partnership for delivering STI clinic services to key populations**, in Andhra Pradesh. Other models of public sector initiatives are described in case studies in Chapters 4 and 6. **Case study 4.1: Master health check-up campaign** describes working with government clinics to provide a wide range of services, including general health care, for a limited time period. **Case study 6.3: Increasing access to STI services at public health facilities for key populations** describes mainstreaming key population's health care to government clinics for sustainability.

Case study 6.4: Sustaining STI and HIV services for men who have sex with men (MSM)/ transgenders (TG) through a public-private partnership describes setting up low-cost STI/HIV services in collaboration with a large government hospital for MSM and TG in Mumbai.

Preferred providers, as mentioned earlier, had been providing general health services to key populations even before the Avahan program and were fully accepted and trusted by the community. However, they often did not have up-to-date knowledge of national guidelines for effective STI management. In the final case study, **Case Study 2.7: Preferred provider model for widely dispersed rural key populations,** of Andhra Pradesh accessed services from a network of trained and supported private practitioners.

CASE STUDY 2.1: Nurse-led STI management

This case study describes the successful training of nurses as STI service providers to increase availability and access to services for female sex workers (FSWs) and people who inject drugs (PWID) in the context of a shortage of doctors in rural areas.

Clinic type: Stand-alone NGO-run clinics and mobile outreach clinics
Location: Manipur and Nagaland, North East India
Project: Project ORCHID, Emmanuel Hospital Association and the Australian International Health Institute of the University of Melbourne
Target population: PWID and FSWs

Background and rationale

The HIV epidemic context in Manipur and Nagaland was different than in the other Avahan states. Injecting drug use was more common than in other states and there was a shortage of physicians, especially in rural areas. Unprotected sex was still an important mode of HIV transmission in both PWID and FSWs, and STI prevalence was high: 39% among FSWs and 18.4%-29.7% among PWID in Nagaland. HIV prevalence was 11.6% among FSWs in Nagaland and 23.1-32.2% among PWID in Manipur (ICMR and FHI 2007).

The project team identified barriers to access to care for key populations (KPs) in the region. Travel was difficult due to mountainous terrain and poor roads, longstanding inter-ethnic conflict, and the continued presence of armed insurgency movements. Drug smuggling was common due to the region's location near the "Golden Triangle," a major opium-producing area. Decades of strained politics had severely affected the local economy leading to high levels of unemployment and poverty, as well as migration within and out of the states. Additional structural barriers that limited KPs' access to the health services that did exist included fear of discrimination and lack of confidentiality.

To improve accessibility and coverage of STI management services for KPs, services needed to be made available closer to the clients to alleviate transportation and other structural difficulties. More focus was needed on STI management to address the high prevalence of STI among KPs. Thus, customized clinical services were required to address HIV transmission due to both unsafe injection equipment use and unprotected sex in the context of a shortage of physicians. A WHO consultant helped the Project ORCHID clinical team explore options and ultimately adapt a model of nurse-led service delivery through NGO-run static and outreach clinics.

Intervention components

STI clinic services: Static STI clinics were usually co-located with drop-in centers in places convenient for the clients. STI clinics were open five or six days a week from 9 am to 5 pm. Services included nurse-led syndromic STI management (including partner treatment), regular STI check-ups, syphilis screening, management of injection abscesses, drug overdose and general ailments. In addition, clinics provided condoms, needles and syringes, as well as behavior change communication (BCC). Pre-test counseling for HIV testing was provided at the STI clinic with referral to integrated counseling and testing centers (ICTC)[6] for the laboratory test and results. Referrals were also provided for tuberculosis diagnosis and treatment services as needed. A typical STI clinic was staffed by a nurse and a counselor, as well as a visiting doctor who was available at the clinic for a few hours one-two times per week. A few clinics also had nursing assistants.

Outreach clinics were introduced later in the program. The clinic nurse, counselor, outreach worker and peer outreach worker travelled to remote locations to provide on-site STI clinic services. The outreach clinics provided behavior change education, condom promotion, STI check-ups and syndromic management, injection abscess care and point-of-care syphilis screening using finger-prick whole blood. The location and timing of the mobile clinics were determined based on mapping and lists of registered KPs, as well as on information gathered from focus group discussions and interviews with community members and NGOs. The clinics were conducted 3-5 times per month by each NGO and were often scheduled to coincide with visits from the State AIDS Control Society (SACS) sponsored mobile HIV testing unit.

Staffing: A core STI clinic team included a nurse, counselor, and outreach workers, with representation from the community (see Chapter 1 on Community Participation).

The *nurses* were registered auxiliary nurse midwives or general nurse midwives and were responsible for overall clinic management and patient examination (including internal examination), diagnosis and treatment (including provision of antibiotics).

The *counselors* were mostly university graduates who were trained to provide counseling to KPs and to conduct individual and group sessions with clients.

A *visiting doctor* visited the clinics two or three times weekly (if available) to consult on complicated cases and provide supervision and mentoring for the nurse providers.

The *outreach team* (NGO outreach Staff, peer outreach workers and peer volunteers) encouraged clients to access STI services (at either static or outreach clinics), promoted condom use, and facilitated patient follow-up and partner treatment. The outreach team was trained in STI identification and referral, BCC, condom promotion and basic counseling.

Training: The nurses in Project ORCHID were trained by FHI 360 and the state lead partner. New clinic staff (nurses and doctors) attended a three-day training program based on the project *Clinical Operation Guidelines & Standards (COGS)*. The COGS was adapted to meet the needs of the programs in Manipur and Nagaland by adding a section on injection abscess management and the training modules were revised to make them more suitable for nurses. Regular training updates were conducted twice yearly.

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[6] An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center

Appropriate and acceptable HIV, STI and harm-reduction messages were developed based on focus group discussions with community members. The messages covered STIs, overdose and abscess symptom recognition and health-seeking behavior, safe injecting and sexual practices, including condom use.

Ensuring quality of care: Project ORCHID state-level clinical coordinators were doctors who paid regular visits to all static STI clinics for regular monitoring and provision of on-site support. The clinical coordinators assessed STI clinic operations to ensure that quality standards were maintained. They also served as mentors to nurses, providing on-site supportive supervision and consultation on complicated cases. The state-level clinical coordinators were in turn supported by quarterly visits from the FHI 360 STI capacity-building team who provided quality monitoring and capacity building of both the clinic nurses and the Project ORCHID state team.

Quality monitoring of clinic services was based on pre-determined clinic service standards and checklists, which included assessment of clinic set-up (infrastructure, equipment, and signage), clinical case management, community involvement, clinic staffing, training, documentation, referral processes, and infection control and waste management.

Challenges

The implementation of the nurse-led STI management program resulted in a relatively high level of service coverage of clients that could not have been achieved if the program were staffed only by the small number of available doctors. However the program did encounter a number of substantial challenges:

- Some of the clients were challenging to work with, especially for young and inexperienced nurses, and it took time to develop a trusting relationship. Clients were sometimes reluctant to consent to regular internal examination.

- Nursing staff were burdened with a heavy workload. Turnover of nursing staff was relatively high, so new nurses needed to be trained regularly.

- Frequent strikes and blockades, poor road connectivity, power outages, and degraded communication systems substantially hampered the delivery of an effective program.

- Pressure from local political groups, anti-drug movements, police, and church groups at hotspots drove the KP clients underground, further distancing them from health services and compromising treatment adherence. It was also difficult to reach FSWs who were not working out of known hotspot areas and those who did not self-identify as FSWs (common in Nagaland).

- Limited health infrastructure made it difficult to establish referral networks.

Lessons learned

In addition to the strategic recruitment of nurses to staff the STI services, the nurse-led STI management program's successes were generally believed to be due to a number of critical components including:

- Peer outreach workers actively encouraged clients to attend the services and assisted with patient follow-up.

- The establishment of clinic committees with community membership helped to promote the acceptability of the clinic services to potential clients.

- Co-locating the static clinics with DICs provided an accessible, safe, non-threatening and confidential space where clients could relax and meet people facing similar challenges.

- The program distributed free commodities (e.g., condoms, needles and syringes) and provided free STI treatment.

- The provision of free care and treatment for basic general health problems attracted clients to the clinics.

- The use of rapid point-of-care kits for syphilis screening at the clinic helped overcome the barriers of limited laboratory capacity for syphilis screening using a traditional non-treponemal test, the logistical difficulties of transport of blood specimens, and patients' fears of blood drawing.

- Collaboration and coordination with the Government Mobile ICTC and tuberculosis clinics is possible and increases the range of clinical services available for KPs.

Outcomes

The implementation of the nurse-led STI management program resulted in more effective STI and harm reduction service provision to FSWs and PWID.

The program substantially increased the STI service coverage among KPs. Adding a nurse-led outreach component was believed to be a major contributor to the increased coverage. It focused on field identification of people with STIs and abscesses, who were then either treated in the field or referred to the static STI clinic for treatment.

Feedback from clients indicated that nurses were seen to be approachable and friendly. The program improved the accessibility of clinic services that were less stigmatizing and intimidating than other regular health care settings (e.g., general hospitals, private and government clinics) and provided home care when needed.

At the start of the intervention, the existing national policy stipulated that only practitioners of modern medicine (MBBS doctors) could prescribe antibiotics for STI syndromic case management. Project ORCHID's successful nurse-led intervention convinced the National AIDS Control Organization (NACO) to issue an official exception allowing trained nurses to provide treatment services in all projects where adequate numbers of qualified doctors are not available.

The level of community participation in clinic level activities and uptake of clinic and DIC services improved over time. Data available from 2009 to 2011 indicate that approximately 20% of the FSW population attended the nurse-run clinics each month. In Manipur, over 55% of the FSW population attended a clinic at least once a quarter; while in Nagaland it was over 25%. Among PWID, who were significantly more difficult to reach with clinic services, over 60% attended a clinic at least once a year in Manipur, and over 40% in Nagaland.

The quality of the services provided also showed overall improvement in the service provision, particularly in adhering to the treatment guidelines and infection control. In years 2009 and 2010, 100% of patients diagnosed with an STI syndrome were given the appropriate treatment, as were 100% of those with injection abscesses. Both syphilis testing and successful referrals to ICTCs from the clinics rose markedly. An increase in syphilis screening was seen after rapid point-of-care tests were introduced. The nurses also maintained all the reporting documents as per guidelines.

The nurse-led STI management program was successfully managed to deliver effective STI services to hard-to-reach clients in a high HIV prevalence region of the country over a sustained period of time. Increasing coverage of target populations through this model is an example of optimal utilization of scarce human resources that has successfully delivered effective STI services and improved uptake in challenging geographical and resource difficult settings, and the model could be replicated in places with similar conditions.

CASE STUDY 2.2: Reaching female injecting drug users

This case study describes the process of designing and implementing services tailored to increase access to harm reduction and other clinical services for female injecting drug users.

Clinic type: NGO-run static stand-alone clinics and outreach clinics
Location: Manipur and Nagaland, North East India
Target population: Female injecting drug users (female PWID)
Project: Project ORCHID, Emmanuel Hospital Association and the Australian International Health Institute of the University of Melbourne

Background and rationale

Women who inject drugs are an especially vulnerable and marginalized population. In addition the legal problems and social stigma of injecting drug use, female PWID face risk and stigma associated with gender discrimination, violence and poverty. A high proportion of them are also sex workers. A 2011 survey of female PWID in Manipur and Nagaland found that 81% engaged in sex work.[7]

The HIV prevalence among PWID was high in the North East states: 18%-28% among (mostly male) PWID at sentinel sites in Churachandpur (NACO 2007a). Data on HIV among female PWID were sparse. However, sex workers in Manipur were found to have an HIV prevalence of 20%. Since a large proportion of female PWID were also sex workers, they were subject to the risks of both unsafe injecting practices and commercial sex, and it was possible that their HIV prevalence was even higher. Although it was not a random sample, project data indicated that a high proportion (35.5%) of the 169 registered female PWID were HIV-positive.

Female PWID engaged in high rates of HIV risk behaviors. Injection frequency was high. A polling booth survey among female PWID in 2011 revealed a high injecting frequency (mean 22.6 injections per week), and new needles and syringes were used in only 58% of injections. Three-quarters of the women reported sometimes sharing injecting equipment and 20% had shared at their last injection. The number of sexual encounters among the 76% of female PWID who reported sexual intercourse during the previous week was high (mean of 23.7 sexual encounters per week). Only one-third (35%) reported always using condoms with regular partners in the previous month, and 73% always used condoms with non-regular partners.[7]

Female PWID were not accessing existing services for PWID or FSWs. Most of the PWID services were geared to meet the needs of male PWID who accounted for the majority of PWID. On the other hand, female PWID did not access FSW services because they faced discrimination from sex workers who were not drug users, and the staff members working with FSWs had received no training for

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[7]Unpublished project data from polling booth survey conducted in Manipur and Nagaland in 2011. Survey respondents put anonymous unlinked responses into a ballot box, avoiding the social desirability bias associated with face-to-face interviews.

working with the complex issues of female PWID. Only 75 female PWID were registered in the PWID and FSW interventions and very few were attending the drop-in center (DIC). It was apparent that a new approach was needed to reach women who inject drugs.

Intervention components

Planning phase: The first step was a series of consultations with the community of female PWID. The women identified their need for a separate, all-female DIC which was to be their 'home away from home,' a place where they could come together to make friends and to rest and relax. They requested that it be staffed only by women and include a few simple comforts, such as washing facilities. The community selected a DIC location close to a major hotspot.

Taking into account the community preferences, four different targeted intervention (TI) models were considered:

- *Standard PWID model (male and female PWID)*: In this model, female PWID would have their own NGO outreach staff and peer outreach workers but share clinic and DIC services with male PWID. This model was already being implemented throughout the project with low acceptability among female PWID because shared services could not be made women-friendly unless men were effectively excluded. Although there was some overlap in the basic service needs of female and male PWID, the injecting patterns and hotspots for female PWID were quite different, and their high rate of involvement in sex work required different strategies and approaches to service delivery. In addition, the wide gender gap in terms of how the services are delivered made it difficult for staff to provide truly gender-sensitive services in a mixed-gender setting.

- *Stand-alone model (female PWID only)*: This model was the most popular model among female PWID. It was the model that could provide services most customized for the needs of female PWID, but it was not very cost-efficient. Most local female PWID populations were small and the unit cost would be high.

- *Core composite model (female PWID and female sexual partners of male PWID)*: The female sexual partners of PWID in this model were non-injecting partners who did not engage in sex work (i.e., those who were not covered by existing services) and therefore had little in common with female PWID. In general, female partners of PWID were not subject to the degree of stigma and discrimination experienced by female PWID, did not engage in high levels of HIV risk behaviors, and often had negative attitudes toward drug use. Each group required vastly different strategies and services which made joint implementation difficult, and neither group was willing to share facilities or services with the other.

- *Core composite model (female PWID with FSWs)*: This model was acceptable to female PWID because it allowed for an all-female service. As there was significant overlap between female PWID and FSW populations, the two groups could share a DIC and clinic. The female PWID and FSW populations in the project had many similar needs, so staff could tailor the shared services to their needs. This model was also very cost-effective and fit within the NACO budget guidelines for composite services,[8] making it the preferred option in most contexts.

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[8]The NACO core composite model was designed specifically for targeted interventions for multiple core key population groups (e.g., FSWs and PWID in a given geographic area who were able to share infrastructure and management costs).

Implementation phase: The core composite model serving female PWID and FSW together was ultimately adopted for implementation and piloted at one site in Shalom, Churachandpur with a target population of 150 female PWID and 200 non-injecting FSWs.

<u>STI clinic</u>: The STI clinic was located in the DIC and staffed by the nurse provider (see case study 1.1 for nurse-led STI management) and outreach workers (all female staff). It provided STI treatment, testing for syphilis, regular medical check-ups, counseling, basic health education, abscess management, referrals, and follow-up. In addition, overdose management (the clinic stocked naloxone which could be administered by the nurse) was included, as well as a range of basic over-the-counter medicines to make the services more comprehensive and attractive. Basic information on family planning was provided and women were referred to the District Hospital for contraception and abortion services. The doctor was available for consultation three days a week at specific timings, and provided general medical care as well as sexual and reproductive health services. In addition, outreach health camps were provided three times each month in or near selected hotspot locations identified by the outreach team and scheduled to coincide with the mobile integrated counseling and testing center (ICTC)[9] visit.

<u>Referrals and linkage</u>: A wide referral network was established. Clients were usually accompanied to the referral services by outreach staff. Services included integrated counseling and testing centers, prevention of parent-to-child transmission of HIV (PPTCT), antiretroviral therapy (ART) centers, Revised National Tuberculosis Control Program[10], family planning, JSY[11] scheme (provided incentives for institutional deliveries), the Community Care Center for female PWID living with HIV, the Salvation Army for home-based care for people living with HIV, (PLHIV) the Mangal detoxification and rehabilitation center for women supported by the Ministry of Social Justice and Empowerment, and short-stay homes for women who had completed detoxification and rehabilitation and wanted to participate in vocational skills training and income generation activities. Linkages were also established for marketing of products made by women under vocational schemes. Female PWID who requested spiritual or faith-based counseling services were referred to faith-based counseling centers. Additionally, the female PWID program had close ties with PLHIV networks.

<u>Advocacy</u>: The female PWID team regularly engaged in advocacy on behalf of the community. At ICTCs and ART centers, the team explained the difficulty female PWID experienced in waiting for services because of their need for frequent injecting to reduce the likelihood that female PWID would leave without receiving services or become aggressive with staff. Advocacy was also carried out with families, church leaders and women's groups to promote better understanding of the challenges faced by female PWID. Advocacy also focused on reducing harassment of women by the police and other groups.

Implementation challenges

- Competing priorities in the daily lives of female PWID limited their participation in the project services. Many of the women were alienated from their families and/or homeless and needed to focus on obtaining food and shelter. Women participating in the female PWID program

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[9]An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center

[10]A Government of India led tuberculosis control initiative based on the Directly Observed Therapy Short-course (DOTS) strategy of WHO. Launched as a national program in 1997, it provides free anti-tubercular drugs through the government centers (like PHC) and private-sector DOTS-providers.

[11]Janani Suraksha Yojana ('scheme for protecting mothers') an Indian government scheme that aims at decreasing the neo-natal and maternal deaths by promoting institutional delivery of babies through cash incentives. It integrates cash assistance with delivery and post-delivery care.

particularly welcomed the provision of a comfortable and safe space where they could come together and offered each other care and support – something that was very important in the context of the difficult lives they led.

- Female PWID were more stigmatized than male PWID, because: (a) drug use among women was considered as particularly deviant, and (b) the additional stigma of sex work. They were even further stigmatized if they were HIV-positive. They were often subjected to harassment and violence from family, partners, paying clients, police, madams/pimps, and other pressure groups. Male PWID were not usually thrown out of their family home, while female PWID almost always were; when male PWID recovered from their addiction, they were accepted back into their family and society; whereas, female PWID were less likely to reintegrate.

- Female PWID found it difficult to negotiate condom use due to social and economic disempowerment, and the frequent use of drugs and alcohol while engaging in sex work.

- Female PWID experienced multiple health problems. In addition to frequent STIs and HIV infection, they had high rates of tuberculosis, hepatitis C and other diseases. Depression and anxiety were common. Female PWID did not access general health services due to lack of money to pay for services and stigma and discrimination.

- Uptake of opioid substitution therapy (OST) remained low. Although the STI clinic services were provided separately for women, there were no gender-specific OST services. OST centers catered primarily to the needs of the predominantly male clients.

- While condom and needle/syringe coverage were excellent, unsafe injecting and sex were still prevalent among female PWID. Further investigation of injecting behaviors and consistent and correct use of the needles and syringes was needed.

Lessons learned

- Female PWID were a unique community, distinct from both male PWID and female sex workers, and they required a dedicated program and staff. Making the services woman-friendly attracted many women who were previously reluctant to register in a male-dominated program.

- The intervention was able to deliver targeted women-friendly services at a cost comparable to the standard NACO core composite intervention budget. Combining services for FSWs and female PWID was the most cost-effective model for providing services to these women, while ensuring appropriately tailored services and dedicated staff.

- Female PWID services required a higher budget (approximately 15% higher) than for male PWID services. The difference was mostly due to the nearly four times higher demand for needles and syringes due to the higher injection frequency among women.

- Addition of psychosocial services (counseling, childcare facilities, and free meals) had the potential to improve uptake and quality of services. However, the allotted budget could not accommodate addition of these services during the project period.

- OST uptake among female PWID could be improved by providing a female-specific OST center, women-only timings at the main OST clinic, or a sub-clinic specifically for women.

- Mobile clinics made a major contribution to the success of the female PWID program.

Outcomes

The female PWID intervention in Churachandpur achieved consistently high levels of coverage since its inception, which was a dramatic improvement from the low coverage and service utilization rates under the combined male and female PWID services model. Before the introduction of the project in 2010, PWID and FSW targeted interventions had registered only 75 female PWID, and very few of those attended the DIC. By late 2012, the project had exceeded its target of 150, registering 175 active female PWID, with more than one-third regularly attending the DIC. In addition, there were 233 non-injecting FSWs participating in the project.

Prior to the initiation of the project, female PWID rarely visited an STI clinic. Clinic attendance rose rapidly after initiation of the intervention with female PWID and FSW composite services and regular outreach clinics. During the first year of the intervention, all 175 female PWID visited the STI clinic at least once, and the average number of visits per person was 4.14. In the second year, clinic utilization remained high.

HIV and syphilis testing also increased. Of 175 registered female PWID, 169 (97%) were tested for HIV: 60 were found to be HIV-positive, 58 were registered at the ART center, and 27 initiated ART. Testing remained high during the second year of the project with over 80% of the registered women tested at least once for HIV and syphilis.

The needle and syringe exchange program was also successful. The project distributed on an average 90 needles and syringes per person per month (January-August 2012), which accounted for 100% of the monthly demand calculated based on the 2011 risk assessment. The majority (82.6%) of these needles and syringes were returned for safe disposal.

Overall, the pilot project for female PWID was considered a success and won support from stakeholders because it was the first time that women who inject drugs, a particularly vulnerable group with high HIV prevalence, were accessing services.

CASE STUDY 2.3: Outreach clinics at sex work hotspots

This case study describes a cost-effective model of STI service delivery for hard-to-reach female sex workers of different typologies.

Clinic type: Outreach clinics
Location: District Solapur, State of Maharashtra, India
Target population: Female sex workers (FSW). FSW typologies included brothel-based, street-based, home-based, *dhaba*-based,[12] lodge-based,[13] and *Tamasha*[14] theatre artists.
Project: Corridors Project, Karnataka Health Promotion Trust (KHPT)

Background and rationale

Solapur district is located in southeast Maharashtra on the border with Karnataka. In the initial stages of the project, clinical services were delivered at an NGO-run static clinic located at the district headquarters. The clinic failed to attract the desired numbers of FSWs from the district despite a long history of HIV prevention programs in Solapur and the fact that the project clinic

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[12]Roadside restaurants.
[13]Overnight stay hotels.
[14]A traditional form of Marathi theatre with singing and dancing performed by local or travelling theatre groups within the state of Maharashtra, India.

was fully staffed, well equipped and provided free treatment. Although mapping identified 2,500 FSWs in the district, only 320 clinic visits were recorded in the first year.

The project staff and community members identified several barriers to access of clinical services. Sex work hotspots with concentrations of FSWs were located far (35-120 km) from the clinics at the district headquarters (see *Figure 2.1*). Many lodge, *dhaba* and *Tamasha* theatre-based sex workers operated on a contract basis, which meant that their travel was restricted by the owners of the establishment. For nearby sex workers, the clinic hours (limited to mornings) were not convenient since most worked nights and woke up late in the mornings. Many FSWs also worked in the informal sector (e.g., picking and sorting vegetables, at construction sites, etc.) and visiting static clinics during daytime hours would result in loss of wages.

To increase access to STI clinic services among FSWs, services needed to be closer to the FSW hotspots, with convenient locations and operating hours. Through a consultative process with KHPT, the local NGO Niramaya Arogya Dham and community members, it was decided to develop and implement outreach clinics at sex worker hotspots.

Intervention components

The steps in the process of planning and implementation of the outreach clinics are shown in *Figure 2.2*. The outreach team (NGO outreach staff, peer outreach workers, and NGO program staff) conducted micro-planning[15] for all identified hotspots and motivated community members to attend the clinics. The community members suggested dividing the project areas in Solapur district into clusters as shown in *Figure 2.1*. They also specified the days of the week and timings when these clinics should be open for the community.

FIGURE 2.1. Map of Solapur District showing sex work hotspots, each with number of FSWs in the area and distance to the district headquarters where the NGO static clinic was located

(Source: KHPT internal project documents)

In order to motivate the sex workers to use these services, the project conducted many activities through its local implementing NGO partner, Niramaya Arogya Dham. Some of the activities included: informal meetings with new and young sex workers; meetings with brothel madams; festival celebrations and other events at the drop-in center (DIC); lovers/partners meetings; and meetings with condom depot holders.

A clinical team conducted outreach at identified hotspots in the district and provided the same STI services that were available at the static clinics. Clinics were held at sites according to

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[15]Micro-planning is a process that decentralizes outreach management and planning to grassroots-level workers (NGO and peer outreach workers) and allows them to make decisions on how to best reach the maximum number of community members. Micro-planning includes detailed service implementation planning, service provision, and routine evaluation (BMGF 2013).

local preference and availability (e.g., homes of sex workers, mobile vans, etc.). The project added other services to the Essential Service Package (BMGF 2010a), such as screening for syphilis and tuberculosis, referral for HIV testing, and Hepatitis B immunizations. Specialist doctors, such as gynecologists, were recruited as volunteer service providers for special health camps to boost the community's confidence in the project clinics and activities

FIGURE 2.2: Steps in the process of planning and implementing outreach clinics at FSW hotspots
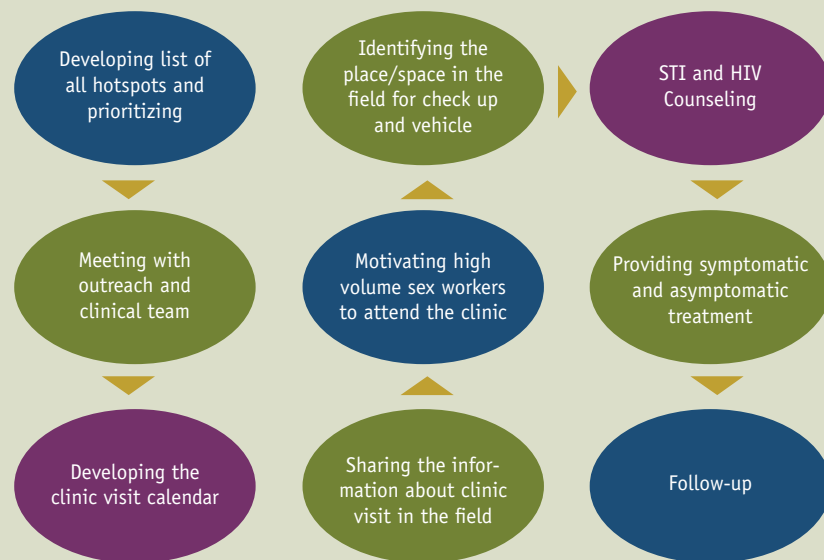
(Source: KHPT internal project documents)

Sustainability phase

As the Avahan program transitioned services to government management through State AIDS Control Societies, the model of NGO-run STI services at static and outreach clinics was reserved for areas with higher concentrations of key populations. In areas, such as Solapur, with a low concentration of FSWs, the National AIDS Control Program-Phase III guidelines mandated service delivery through government-owned clinics or preferred providers to maximize cost-effectiveness and sustainability.

Project staff analyzed the cost of the NGO-run static and outreach clinic model for clinical services provided by Niramaya Arogya Dham in partnership with Kranti Mahila Sangha[16] for general clinic administration and clinic demand generation through peer outreach. The cost per consultation was within the planned budget for Solapur district (based on government-owned or preferred providers' services). The results of the cost analysis were presented to the Maharashtra State AIDS Control Society (MSACS), and agreement was reached to continue the existing model of STI service delivery.

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[16]A CBO based in Solapur, which was established and supported to take over the responsibility of clinic administration and peer-led outreach from the implementing NGO (Niramaya Arogya Dham) in 2011.

Implementation challenges

- In the initial stages of the project, conducting outreach clinics at hotspots was a new concept for both the project staff and the community. It was difficult for the project team to convince the peers and community members to provide a safe and adequate space for clinic services (including internal examinations). To address this problem, KHPT staff conducted meetings with the peer outreach team and helped them understand the clinic requirements. In these meetings, they finalized the days when the community outreach team would visit a particular hotspot and make advance preparations (e.g., setting the clinic opening times, etc.). The community gradually started to support various activities, including obtaining space for the outreach clinic services.

- The clinical team also needed to get accustomed to a new form of service delivery. The senior clinical team member from KHPT helped them understand the need for outreach services and how to implement them. Doctors and nurses were trained on how to conduct clinics at various hotspots, infection control, maintaining confidentiality, and their specific roles and responsibilities. The first outreach clinic was conducted in a home-based sex work setting, at a peer's home. The positive response from the community motivated the clinical team and boosted their confidence.

- To overcome community reservations about outreach clinic services, the outreach and clinical teams organized various activities to foster close links between the community and the project and to build trust. Activities included celebrating local festivals with community members, organizing games and quiz competitions, appreciation of *Tamasha* artists, etc. Project staff organized other activities to reach out to different typologies of sex workers. Advocacy and bonding activities for Tamasha theatre artists involved dance and songs. The project approached home-based FSWs in non-stigmatizing settings (i.e., not in brothels). For street-based sex workers, night clinics were convenient and fit their work schedules.

- The outreach clinical team also faced challenges in convincing FSWs to attend the integrated counseling and testing center (ICTC)[17] for HIV testing. Distance from the ICTCs, reluctance of brothel owners to allow FSWs to visit the sites, and stigma at the ICTC were some of the reasons for poor attendance. To overcome these barriers, KHPT and Niramaya Arogya Dham established a private-public partnership model, and outreach clinics were linked to the nearest government ICTC. The staff at these ICTCs were sensitized and oriented on the special needs of the sex workers in the region.

- It was difficult to find and retain qualified doctors in remote locations in the districts, especially providers who were sensitive to the needs of the community. The task was particularly difficult when it came to fixing the consultancy rates for private sector doctors to provide outreach clinic services since their fees needed to match their private practice fees.

- Maintaining quality of STI management was an ongoing challenge, especially during the second phase, which had a lower budget. Some staff positions were abolished (e.g., counselors) and salaries decreased. Doctors who had been trained in syndromic STI case management and HIV prevention and sensitized to FSW issues needed to be convinced to stay on. The providers providing service to the community from the inception of the project and who had high community acceptance were retained where possible.

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[17]An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center.

Lessons learned

- Outreach clinical services can be provided within the National AIDS Control Organization's (NACO) budget for clinical services. This is a suitable model for clinical service delivery for scattered, low-density populations based in locations with poor health infrastructure and limited availability of services. NGOs can deliver quality clinical outreach services in alignment with government guidelines on costing of clinical services.

- It is possible to sustain outreach clinic services in resource-constrained settings by making optimal use of the limited resources available. In this case, an NGO with a long-standing presence in the community collaborated with a newly established CBO to deliver clinical and other support services to members of the community.

- It is important to hire health care providers who are acceptable to the community and provide training in HIV/STI management and orientation to the project objectives.

Outcomes

The project started by conducting four outreach clinics per month and slowly scaled it up to 21 outreach clinics each month. The scale-up of outreach clinics increased overall clinic utilization. Women were more comfortable with clinics when they were available nearby, and they preferred working with the clinic team, rather than with the general health services. Accessibility and acceptability were increased by providing clinical services at convenient times for the community and avoiding stigma and discrimination.

With increased project presence at hotspots, the outreach teams discovered many FSWs who had not previously been included in mapping exercises and established contact with them. The project coverage of brothel, *dhaba*, lodge and *Tamasha* theatre-based FSWs increased by 50 percent, and home-based FSW coverage increased almost threefold. More new and younger sex workers (who have a higher risk of STI and HIV) were registered. The overall coverage through peer outreach in Solapur increased from 2,950 to 4,800 FSWs.

With the scale-up of outreach clinics at FSW hotspots, the number of STI episodes treated annually in the clinics increased by over 50-fold. The clinical team treated 18,057 STI episodes in 2010-11, compared to only 320 in the year prior to introducing outreach clinics (2006-2007). As clinic attendance increased and referral linkages to HIV testing and counseling services were improved, the number of FSWs tested each year increased from 0 in 2006-2007 to nearly 4,000 in 2010-2011.

CASE STUDY 2.4: Bar-based clinic services

This case study describes provision of venue-based STI treatment services for women selling sex in dance bars in Mumbai.

Clinic type: Outreach clinic
Location: Mumbai, India
Target population: Bar girls[18]
Project: Aastha, FHI 360

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[18]A bar girl in an Indian context (and for the purpose of this document) is a woman who works as a dancer in bars but also sometimes provides company or sexual services to patrons.

Background

About 45 percent of the 35,000 FSWs targeted by Aastha were bar girls, mostly working in dance bars.[19] Dance bars were legally banned in the state of Maharashtra in 2005. Nevertheless, many bars continued to operate underground in Mumbai and Thane districts with no signage and sometimes hidden in residential areas. Women who worked as dancers in the bars earned less from dancing after the bars were banned and increasingly turned to sex work to supplement their incomes. While continuing to work in the dance bars, they worked extra shifts in a variety of venues, such as waitresses or singers at "service bars" and "karaoke orchestra bars" (and provided sexual services to bar patrons in rooms above the bars or in nearby lodges), or as waitresses in "silence bars" (where sexual services were provided to clients at tables within the dark interior of the bar), and as *Mujra* dancers[20] at events and private parties, which also included providing sexual favors. Alcohol use was common among bar girls and dancers while working. Most bar girls working in Mumbai were from distant states in India, particularly Rajasthan and West Bengal.

Aastha staff found it difficult to provide clinical services to bar girls in the same way as other FSWs under the project. Their long working hours and multiple shifts reduced the opportunities for NGO staff to carry out HIV prevention activities. Providing services in areas where many of the bar girls lived was difficult since they generally woke up late in the day and were busy with chores or errands before rushing to the bar for the evening shift. The bar girls did not want to be seen interacting with NGO staff at their place of residence because they wanted to maintain anonymity in their neighborhood and not want their neighbors to be aware of their type of work.

After assessing the situation, it was apparent that the best place to reach bar girls was in the bars themselves. In order to make STI/HIV testing services accessible, the Aastha team organized outreach clinics with STI services and HIV counseling and testing.

Intervention components

After obtaining permission from the bar managers and/or owners, Aastha staff made outreach clinic services available at green rooms (changing and dressing rooms) inside the bars. The day and timing of the clinic was fixed and was decided jointly by the outreach and clinic team every month. The frequency of the clinic in a particular bar varied from weekly to monthly, depending on the number of bar girls at the venue.

The outreach team informed the bar girls well in advance about the day, place and timing of the outreach clinic. On the day of the clinic, the outreach team would visit the bars a few hours before the start of the clinic to motivate the girls to access clinical services. The clinic team would then arrive with their supplies at the designated site about 15 minutes before the clinic was scheduled to begin and set up the clinic at one end of the green room, which was curtained off for privacy.[21]

A folding bed was used as a makeshift examination table where speculum examinations were conducted. When required, blood samples were collected for syphilis and HIV testing after pre-test counseling (see **Case study 4.2: Scaling up HIV screening for key populations**). The blood

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[19]Dance bar is a term used in India to refer to bars where adult entertainment in the form of dances by women is provided for male patrons in exchange for cash.
[20]*Mujra* is a form of dance performed by courtesans during the Mughal era.
[21]The team was not able to ensure audio privacy, but the green room was loud and busy with preparations for performances and effectively provided enough distraction for a comfortable level of privacy.

samples were carried back to the static clinic for testing. The bar girls received the results along with post-test counseling either at the static clinic (if the client was willing to attend) or at the next clinic held in the bar. If the client tested positive for syphilis and/or HIV, she was advised to attend the static clinic for further management.

Implementation challenges

- Convincing the bar management to allow staff to conduct their activities inside the bar was difficult and required extensive advocacy with the bar owners' association and with other NGOs working with bar girls. After permission was granted, continuous networking with the bar managers/owners and the *"chotus"* (the young boys who ran errands) was required.

- Gaining access to bar girls inside the bars was difficult as many of the bar girls lacked interest, did not have the time to meet staff, or were busy with clients. For gaining acceptability and to make behavior change communication activities more effective, project staff used innovative methods to motivate bar girls to participate in these activities. For example, they interspersed health messages with beauty tips and focused on positive messages about wellness and the need to stay healthy rather than fear-based messages.

- The outreach clinic team had to work with challenging space limitations in most bars.

- Maintaining regular, sustained services for individuals was a challenge since bar girls were extremely mobile. They changed jobs frequently, sometimes taking jobs in bars that were not visited by the Aastha team, and they also visited their home towns for long stretches of time.

Outcomes

The number of clinic visits by bar girls increased over the course of the project after implementing the bar-based clinic services (*Table 2.2*). The clinic attendance figures increased despite the change in protocol from monthly to quarterly screening visits. In addition, there was an increasing proportion of the clinical services being provided at the outreach clinics (*Figure 2.3*).

After transitioning the services to the National AIDS Control Organization/State AIDS Control Society support in 2012, most of the on-site bar clinics were continued because of the obvious benefits for bar girls, in spite of the fact that these kind of clinics are not mentioned in the national guidelines.

Table 2.2. Number of clinic visits by bar girls from 2005 to 2009 (Avahan individual tracking data)

Year	No. of clinic visits
2005	2,158
2006	26,360
2007	45,213
2008	58,818
2009	56,285

FIGURE 2.3: Increasing proportion of clinical services accessed through outreach clinics

Bar girls visits increased among outreach clinics
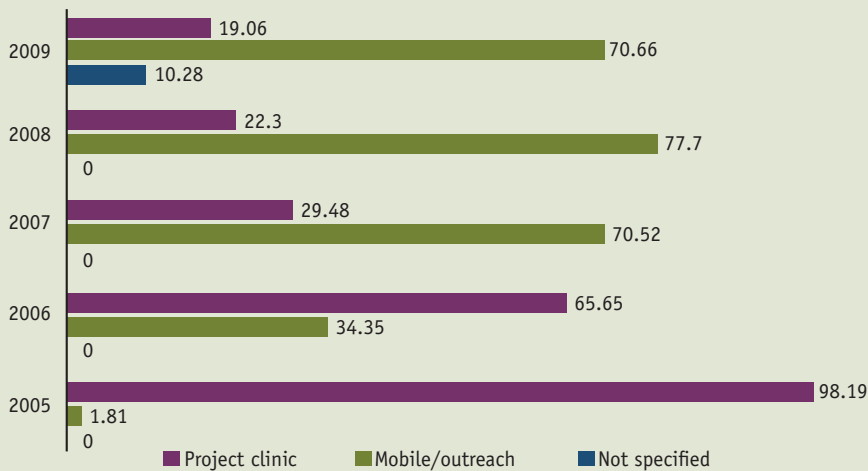
(Source: Avahan individual tracking data)

Proportion of visits by type of clinic. N= 188,834 visits. Pearson chi2(8)= 3.8e + 04. P < 0.0001

CASE STUDY 2.5: Broker-based clinics for long-distance truckers

This case study describes an intervention to increase STI clinic service uptake among long-distance truckers by strategically positioning outreach clinics at the busiest broker offices at transshipment locations (halt points) across nine states.

Clinic type: Satellite (outreach) clinics
Location: Along national highways across nine states
Target population: Long-distance truckers
Project: Project Kavach, Transport Corporation of India Foundation (TCIF)

Background

Of the estimated five million truck drivers in the country, about 40 percent (two million) are long-distance truckers who travel 800 km or more in a single direction. These long distance truckers cover approximately 8,000-10,000 km per month on inter-city routes.

Truckers play an important role in the Indian HIV epidemic. Surveys among truckers have documented high-risk behaviors for HIV, including multiple sexual partners. Findings from these studies indicated that truckers were three times more likely to have non-regular partner sex than other men in the general population in India (FHI 2001, NACO 2001a). One-third of truckers reported engaging in commercial sex and an estimated 10%-12% of clients of female sex workers were reportedly truckers (NACO 2001b). HIV prevalence among long-distance truckers ranged from 3%-7%, and 1%-7% had at least one STI (ICMR and FHI 2007). Length of time away from home and younger age were correlated with higher levels of risk behavior among truckers in India (FHI 2001); long-distance truckers are therefore at higher risk of acquiring HIV and STIs than other truckers because of the amount of time they spend away from home (up to 67% of their time is spent on the road) and their relatively young age.

Project Kavach initially provided services at 36 locations along major national highways. However, after the first 18 months of operation, data from a behavioral tracking survey in mid-2005 (internal project documents) and Avahan's routine monitoring system revealed that program awareness among the target population was only 12% and clinical service uptake was only 7%. In addition, nearly half of all services were being provided to individuals other than long-distance truckers (e.g., hotel and restaurant workers).

Based on these findings, the project team re-designed the intervention to maximize coverage of long-distance truckers. The new design took into consideration the mobility patterns of truckers, fragmented ownership in the transportation industry, and the need to focus on high-yield intervention sites. A review of the mobility patterns of truckers identified transshipment locations (TSL)[22] as the only halting place where truckers were present in sufficient numbers and for long enough periods to be able to provide meaningful interventions. Each TSL was spread across an area of 6-8 square kilometers, serving 10,000-70,000 truckers per month. The truckers were a mix of long-distance truckers between consignments as well as short-distance and local truckers picking up goods for distribution within the state. Among the hundreds of TSLs in the country, 17 were selected along the national highways as intervention sites to maximize coverage of long-distance truckers and to make optimal use of resources.

The project decided to mainly target the truckers who work for small operators who own five or fewer trucks (known as 'free agents') that make up the largest proportion (77 percent) of long-distance truckers because of their accessibility at either commercial transshipment locations or at the premises of companies they had contracts with.

Intervention components

The project delivered clinical services at each TSL through a combination of a static clinic and satellite clinics at brokers' premises. Long-distance truckers congregate at the office of the broker[23] who commissions their next load and also acts as a confidant and mentor. Truckers stayed at the broker premises so as not to miss out on any work opportunities. Therefore, broker premises provided "natural traffic" areas where large groups of long-distance truckers (upwards of 50 at a time) could easily be accessed.

Every static clinic carried the same branding as *Khushi* Clinics[24] and delivered standardized care. To avoid the stigma attached to STI clinics, the clinics provided treatment for a wide variety of minor ailments in addition to STIs. Static clinic staff were employed by the local NGO and included doctors, nurses, counselors and outreach workers.

Process of establishing an intervention at a TSL: Before establishing services at TSLs, TCIF obtained permission from the local State AIDS Control Society to operate in the area and to provide information on other NGOs operating at the halt point in order to avoid duplication of interventions. A local NGO was contracted to implement services at the TSL.

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[22]Transshipment refers to the practice of shipment goods to an intermediate location before onward shipping to the destination. Shipments are either consolidated or transferred to another means of transport. Transshipment takes place in transport hubs, called transshipment locations in India. These are high volume hubs where long-distance truckers halt for at least 12 hours.

[23]A broker is an individual or company that serves as a liaison between another individual/company that needs shipping services and an authorized carrier (trucking companies like TCI in this case study). A broker plays an important role in the movement of cargo.

[24] *Khushi* means happiness in Hindi. For more details, see **Case study 5.1: Clinic branding** about clinical services by TCIF.

Once the static STI clinic was established, services were extended to satellite clinics held at on brokers' premises. Steps in the planning of the satellite clinics were as follows:

- *Selection and involvement of brokers*: A broker census was carried out to determine the number of brokers in a TSL who were eligible to be part of the project, especially satellite clinical service delivery. An outreach plan based on the brokers census was developed. Four to five brokers were selected for satellite clinic service delivery. The selection criteria for brokers included:

  – *Location within the TSL*: Brokers' offices with high trucker traffic and those situated near areas where truckers congregated were preferred. Whenever possible, satellite clinics were located at broker premises that were easily accessible for truckers enrolled with other nearby brokers to increase the overall uptake of services.

  – *Route clusters*: The program adopted an interesting approach to identify route-based site denominators. Extensive interviews were held with transport operators (brokers and transport owners) to ascertain the number of trucks dispatched per month by route category and the number of truckers employed per truck. Based on estimated cycle times across routes, and using an average number of truckers per truck, the program estimated the total number to be reached at an individual TSL. This helped identify major route categories to be targeted for optimal outreach. At a program level, the enumerated trucker numbers was found to be 766,000 unique long-distance truckers. For example, the highest numbers were found along the North-South corridor (26%) followed by North- East (21%).

  – *Popularity and willingness to participate*: Brokers who were popular and in contact with large numbers of truckers and their helpers and who expressed interest in participating in this initiative were preferred.

- *Satellite (outreach) clinics in broker premises*: Once the broker was selected, satellite clinics were held on the broker's premises. Clinics were conducted inside the office space when possible or in temporary tents pitched in front of the office when indoor space was limited. The satellite clinics were allied with the large static (*Khushi*) clinic in each TSL. This substantially increased the visibility of the program and also offered truckers easy access to health services. The project also conducted monthly health camps at the intervention sites on fixed days to provide truckers with quality specialist health services. Satellite clinics operated for a total of 96 hours/month in category A & B TSL locations and for 48 hours/month in category C locations[25] in order to handle a patient load of nine clients per hour (total of 864) and six patients per hour (total of 288), respectively. Two doctors attached to each *Khushi* (static) clinic took turns visiting the satellite (outreach) clinics, which operated on fixed days of the week at each location, as well as other outreach clinical services at health camps, mobile vans and tent clinics. Depending on the number of clients attending such clinics, the doctor could be asked to conduct sessions at two or more clinics on the same day.

- *Outreach*: The clinical services component was supported by a peer-led outreach program for behavior change communication (including exhibitions, fairs, and dialog-based interpersonal communication), condom promotion, and to mobilize truckers to visit the clinics. Truckers were trained as peer outreach workers. In addition, shopkeepers and helpers were involved

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[25]Category A interventions: project interventions where the traffic of truckers/helpers visiting TSL per month was 30,000 or more. Category B interventions: between 10,000-30,000 truckers/helpers, Category C: less than 10,000 truckers/helpers visiting TSL/month.

in peer education who offered their services voluntarily and also provided social marketing of condoms. The project developed a set of participatory tools and visual aids to facilitate discussions among groups of 10-12 truckers on topics relating to HIV, STIs, common misconceptions and the importance of condom use. Around 350 truckers and ex-truckers (50 percent of whom are active truckers) were recruited throughout the entire project (at 17 TSLs) to generate awareness. They conducted approximately 5,000 group discussions with fellow truckers every month.

- *Monitoring the program*: The TCIF monitored Project Kavach by periodically meeting with its partner NGOs to discuss the progress of their interventions and areas of possible improvement. A trucker making a first visit to a clinic was issued a "*Khushi* passport," a diary recording details of the trucker's medical history, diagnosis and treatment. The trucker was expected to bring this diary each time he visited a clinic. The diary also contained the addresses of all 17 *Khushi* clinics in India to encourage the trucker to use their services when travelling in the area where they are located. Each trucker visiting a clinic also had a unique identification number, which helped clinic staff track his medical records in their database. This central database was maintained by TCIF.

Implementation challenges

- Some truckers were hesitant to attend broker-based clinics due to the perceived stigma. They did not want brokers to see them entering the clinic or hear them discussing health and HIV/STI concerns.

- Space constraints sometimes resulted in poor audio-visual privacy for clients, which in turn affected quality of care.

- Doctors were sometimes unwilling to conduct sessions in the satellite or mobile clinics at two different locations on the same day. This, along with poor motivation, sometimes resulted in a high turnover of doctors in the project.

- It was difficult to organize clinics in tents during the summer due to the extreme heat.

- Although engaging other industry stakeholders and forging partnerships with other companies that interacted with the trucking industry on a large scale (e.g., oil and gas companies with stations along the highways) would potentially increase coverage of services, many of these partners did not consider HIV prevention to be important and refused to participate.

Lessons learned

- It was critical to involve the doctor, the Project Coordinator, TCIF regional STI Officer and TCIF Project Officer in the final selection of satellite clinics because of the complexity of providing outreach clinical services in busy locations and cramped spaces.

- It was important to collect information on 'source' and 'destination city' and the route clusters the truckers operated on in order to ensure a better follow-up at other *Khushi* clinics at other TSLs along their route.

- A strong outreach education component with high visibility and a range of activities (e.g., interactive health games and exhibitions) was important to generate demand for clinical services.

- Brokers and transporters were supportive of the initiative and provided their own office space to conduct satellite clinics. However, maintaining good relations with brokers and limiting the inconvenience of the clinics at their premises were important. Experience showed that for effective clinical services and optimal use of resources, only one clinic should be organized at any given brokers premise in one day and lasting for not more than four hrs. It was also important to let brokers know the date and operating times of satellite clinics well in advance to ensure smooth conduct of the clinic and to have fixed dates arranged for follow-up visits.

- The project successfully demonstrated that peer outreach is possible with a mobile population. This was the first Indian national program to successfully use active truckers as peer outreach workers. Innovative communication methods were developed to minimize message fatigue and stigma associated with attending outreach activities. For example, truckers were involved as actors in the street theatre. Positioning clinics as 'wellness' clinics instead of STI clinics also helped address the issue of stigma.

- The most optimal use of resources to reach a mobile population is to select a limited number of high-impact locations (e.g. places where a significant portion of the mobile population travel through), rather than spread resources across a large number of sites. This enables the program to saturate coverage in these locations and derive the greatest value. In addition, a route-based approach to planning and delivery of services helped prioritize route categories and obtain high coverage on critical route segments.

- A broker census helped establish the flow of truckers through each TSL and provided an estimate of the population in need of services to use as a denominator in calculating service uptake and for prioritizing services in areas of the highest density of truckers.

Outcomes

Service Uptake: Increased visibility, refined intervention design, better site selection and improved access resulting from the broker-based clinic strategy led to a substantial increase

FIGURE 2.4. Monthly average number of clinic visits at *Khushi* clinics, by year, 2005-08

36 Intervention locations

17 Intervention locations

5,380

8,090

15,724

20,709

2005   2006   2007   2008

Average number of clinic visits per month
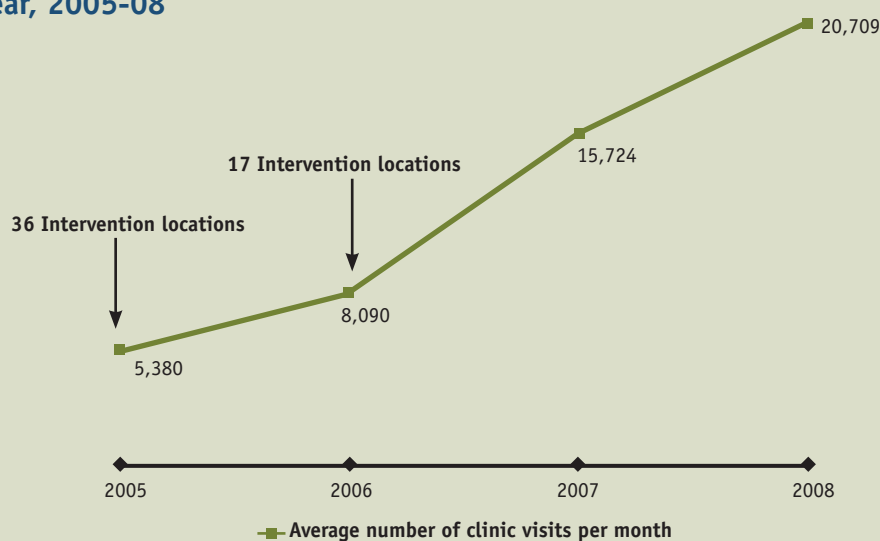
Source: TCIF Routine Monitoring System

in the uptake of clinical services. Monthly clinic uptake across the project increased four-fold despite cutting the total number of intervention locations by half during the program re-design in 2006. The last round of the behavior tracking survey in 2009 indicated that almost one-fifth of the truckers sampled had accessed services at the *Khushi* clinics, compared to only seven percent in 2005 (IMRB 4th round, 2005; internal project documents). The ease of access and enhanced visibility offered by satellite clinics were a large factor in the increased uptake; about two-thirds of the client visits at program clinics each month were at satellite clinics.

The project also demonstrated a progressive increase in knowledge and behavior indicators over a period of time (2005 to 2009). Awareness of STIs increased from 74.8% in 2005 to 82.4% in 2009; reported condom use at last contact with a paid partner stayed high at just over 90%; and self-perception of HIV risk more than doubled from 6.6% to 14.2%.

CASE STUDY 2.6: Public-private partnership for delivering STI clinic services to key populations

This case study describes the "Mythri Mainstreaming Model," a public-private partnership between NGOs and government health services for delivery of STI clinical services to key populations.

Clinic type: Government-owned clinics
Target Population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM), and transgenders (TG)
Location: Andhra Pradesh, South India
Project: India HIV/AIDS Alliance

Background

The state of Andhra Pradesh is one of the six highest HIV prevalence states in India. In 2003, it had the second highest number of HIV infections in the country, accounting for approximately 10% of the estimated national HIV burden (NACO 2003). Sexual transmission was the major mode of transmission, accounting for 91% of new cases. In 2004, the HIV prevalence was 1.6% among pregnant women attending antenatal clinic and 23% among STI patients (NACO 2004)

During the first phase (2003-2008) of the Avahan project, a network of project clinics run by NGOs was established. All STI clinics and DICs in the programs were named *Mythri*[26] centers. The *Mythri* clinics offered the Avahan essential package of STI services for FSWs, HR-MSM, and TG (BMGF 2010a). Mythri clinics were either *static* [project-owned clinic in a drop-in center (DIC) or another site preferred by the key populations (KPs)], *satellite* (mostly organized in the DICs on certain days of the week in areas where the size of the KP did not justify a full-time clinic) or *mobile* (in areas with scattered populations that were difficult to access).

The second phase (2009-2014) of Avahan focused on consolidating the gains made in the first phase and transferring the program to government in a phased manner (see Chapter 7, Sustainability). Ensuring sustainability of clinical services on a long-term basis required a model for providing the same quality services at a lower operating cost. Two options were considered: (a) working through existing public health care institutions, and (b) working through private practitioners. The project chose the first option as it provided a sustainable alternative to program-owned STI clinics run by NGOs affiliated to Alliance India. In order to

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[26]Mythri means 'friendship' in Telugu, the local language.

be successful,the model would need to provide KP-friendly STI/HIV services, especially in areas with low and scattered populations; strengthen the capacity of the public health care system; sensitize the KP communities and generate demand for government services; and reduce the stigma associated with accessing STI services from public health care facilities.

The *Mythri* Mainstreaming Model, a public-private partnership with the Andhra Pradesh State AIDS Control Society (APSACS), was developed to provide STI clinical services at government-owned clinics for FSWs, HR-MSM and TG.

Intervention components

Planning phase: The India HIV/AIDS Alliance in collaboration with APSACS and Avahan conceptualized the model. District and state-level medical officers were also involved in discussions and a directive was issued to all district medical officers to support the implementation of this initiative at government clinics.

The *Mythri* Mainstreaming Model used the infrastructure and personnel of existing public health care facilities and supplemented it with NGO support. The selection of government clinics for participation in the *Mythri* Mainstreaming Model clinic was based on a list of criteria, including:

- Availability of adequate staff and infrastructure

- Located within a 5 km radius of the target community

- Acceptability of services by the community

- Willingness of staff to participate in the program and to provide services after regular outpatient hours

Government facilities provided the space for clinic operations and a medical officer on fixed days and times, usually in the afternoons after the regular outpatient clinic hours (using the same treatment area). *Mythri* clinic services included STI syndromic case management, presumptive treatment, syphilis screening and treatment, verbal screening for tuberculosis (TB) and referrals for HIV, TB and care and support services. The government doctors were remunerated on a fee per client basis, based on the National AIDS Control Organization's (NACO) costing guidelines. The project made use of the provision made by the state government to allow public sector doctors (government doctors) to engage in private practice outside of their regular government duty hours. Services rendered in the *Mythri* Mainstreaming Model did not clash with their regular government duty and were regarded as an extension of private practice.

The implementing NGO ensured that the *Mythri* Mainstreaming Model clinic was at a location acceptable to the community, KP-friendly and government providers were responsive to KP needs with a non-stigmatizing attitude. NGO staff, including a nurse and counselor, attended the clinics, bringing supplies and managing operations. The NGO staff provided drugs, condoms, and equipment (e.g., speculums and proctoscopes). They also managed the KP clinics, including documentation, collection and maintenance of patient records, management and dispensing of drug stocks and condoms, and reporting clinic statistics. The counselor provided risk-reduction counseling, condom promotion and distribution.

The implementing NGO was also responsible for community outreach, including community mobilization, health education and condom promotion through peer outreach, community monitoring, networking and establishing referral linkages.

India HIV/AIDS Alliance was responsible for capacity building, including training medical officers and nurses (usually auxiliary-nurse midwives) on STI syndromic case management, clinic operational guidelines and primary HIV care (i.e., care of simple opportunistic infections and chemoprophylaxis using cotrimoxazole); training NGO staff on peer outreach and micro-planning for ensuring quarterly routine STI check-ups and bi-annual syphilis screening; and regular supportive supervision to the clinics and mentoring for doctors and auxiliary-nurse midwives.

Implementation challenges

- The medical officer was often not consistently available on specified KP clinic days. Since government doctors have multiple responsibilities, they were often assigned to different jobs on a given day leading to postponement of clinic services.

- Since the KP clinics were managed by the NGO auxiliary-nurse midwives, if the auxiliary-nurse midwife was not available for any reason on a designated clinic day, there were challenges with documentation, drug dispensing and syphilis screening. The clinics could not function with the physician alone and depended on substantial support from NGO staff.

- Despite providing services in rural clinics, some KPs lived far from the clinic sites. This was especially problematic when the doctor was not reliably available on designated clinic days.

Lessons learned

- Stigma-free services can be provided for KPs at government clinics by conducting training and sensitization workshops for government doctors and designating specific clinic hours for KPs.

- The presence of NGO nurses in the clinic helped with syphilis screening (over 80 percent clients screened), data collection, drug dispensing, and most importantly, in ensuring non-judgmental and respectful services tailored to the KPs needs.

- Maintaining individual medical records helped to streamline follow-up and tracking of KPs.

- Situating the clinics in the government clinics facilitated a model of a 'one-stop' center for all health care needs of KPs (general ailments, HIV counseling and testing and TB-related services) and increased acceptability of the clinics.

Outcomes

The *Mythri* Mainstreaming Model was successful in providing KP-friendly STI/HIV services, especially in areas with low and scattered populations. It also strengthened the public health care system and reduced stigma for KPs accessing services. Overall, there was greater understanding among the medical staff on issues related to KPs. Trained medical officers in government facilities showed improved knowledge and skills in management of STIs (internal project documents). The community had access to more user-friendly services in a stigma-free environment (Alliance 2010).

FIGURE 2.5. STI clinic utilization by key populations in *Mythri* Mainstreaming Model clinics (2008-2010) (Kanth et al. 2012)
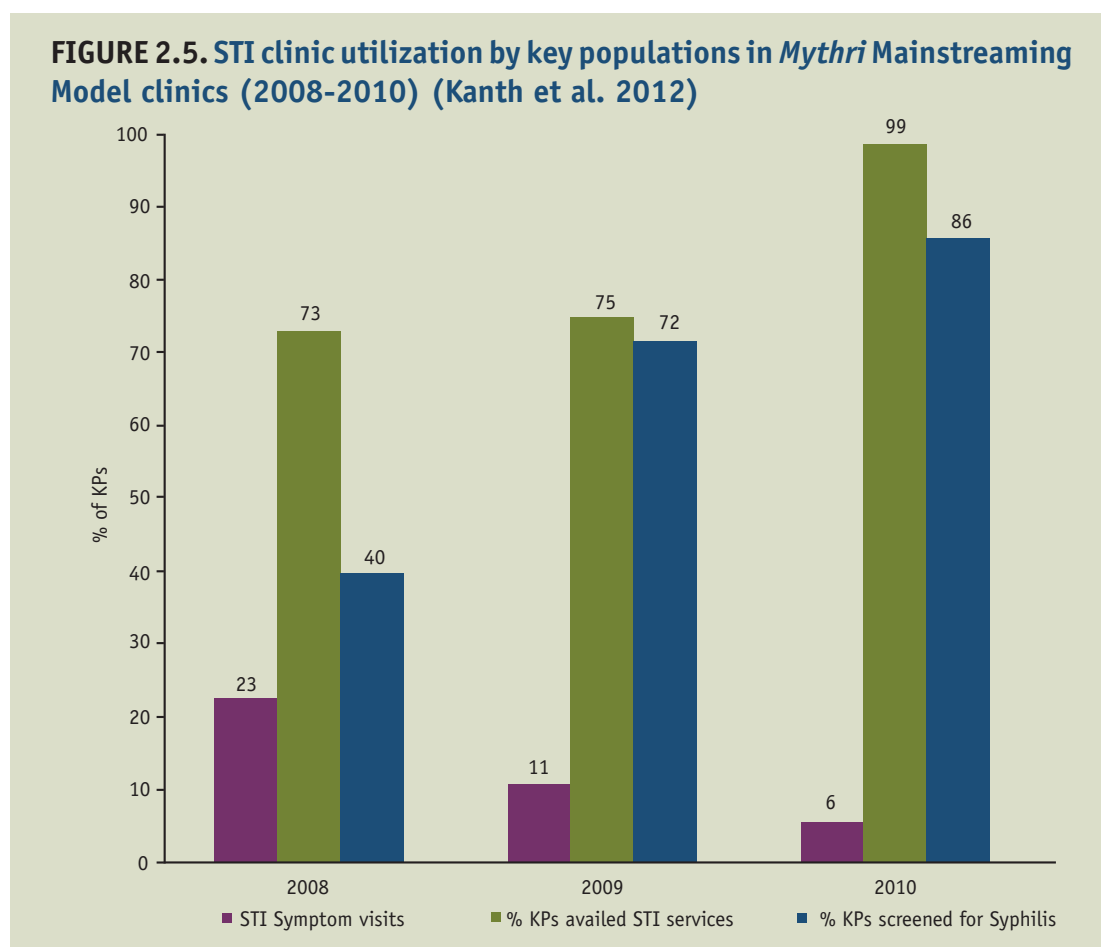
Table 2.3. Comparison of clinic data for *Mythri* Mainstreaming Model, project-owned and private clinics (Jan – Dec 2010) (Kanth et al. 2012)

Indicator	*Mythri* Mainstreaming Model clinics	Project owned clinics	Private clinics
Number of total KPs covered	13,351	33,850	5,538
Percentage of KPs accessing clinic services every month	31%	29%	28%
Percentage of KPs availing STI consultations every quarter	72%	70%	70%
Percentage of KPs availing regular medical check-up every quarter	68%	68%	66%
STI rates	6%	3%	5%
Percentage of KPs screened for syphilis during the year	86%	81%	78%
Percentage of KPs screened for HIV during the year	68%	66%	62%

The model helped change perceptions of KPs regarding the public health care system, resulting in improved utilization of the public health care facilities. Within the first year of initiating the *Mythri* mainstreaming clinics (2008), over 70 percent of the KPs had accessed the STI services *(see Figure 2.5)*.

A cost-effectiveness analysis of 2010 program data was carried out based on 52,117 clinic visits by KPs at 127 clinics [49 project-owned clinics, 48 *Mythri* Mainstreaming Model clinics, and 30 private (preferred provider) clinics]. Clinic uptake and performance in the *Mythri* Mainstreaming Model centers compared favorably with the project-owned static clinics and private clinics (see *Table 2.3*). In addition, the *Mythri* Mainstreaming Model was more cost-effective than the other clinic models. STI services cost INR 155 per patient per annum in *Mythri* clinics compared to INR 303 in project-owned clinics and INR 191 in private clinics (USD 1 = INR 50) (Kanth et al. 2012).

CASE STUDY 2.7: Preferred provider model for widely dispersed rural key populations

This case study describes the development of a model of STI service provision by private and government sector medical doctors to increase access for low-density and widely dispersed key populations.

Clinic type: Preferred providers from private and government sectors
Location: Nine coastal districts of Andhra Pradesh, South India
Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG)
Project: Swagati Project, Hindustan Latex Family Planning Promotion Trust (HLFPPT)

Background

The Swagati Project operated in nine districts of the state with an estimated key population (KP) of 35,657 in phase I of Avahan. The project was scaled back to four districts in the transition phase when the projects were handed over to the Andhra Pradesh State AIDS Control Society (APSACS). Based on the context and needs of the KPs, different combinations of service delivery models were adopted: static clinic only, preferred providers only, static clinic combined with preferred providers, preferred providers combined with health camps, or all three (static, preferred providers, health camps) models together.

The preferred provider model was designed to address the challenge of widely dispersed KPs who were not able to access services from the project-owned static clinic or the government STI clinic. The preferred provider model was established in sites where the FSW or HR-MSM populations numbered less than 800. In areas with a larger but widely dispersed population, a hybrid model combining a static clinic and preferred providers was selected.

Intervention components

The preferred provider model of service delivery was based on a contract between the medical doctor[27] practicing in or near a hotspot and the implementing NGO/CBO for providing standardized and quality STI services for KPs. The process of operationalizing the preferred provider model based on the experience of HLFPPT is described in detail in this section.

Selection of preferred providers: Preferred providers were private or government sector medical practitioners who had been providing health services to the community for some time and had earned their trust. The Swagati project hired these practitioners to deliver STI services to KPs. Selecting and contracting the preferred providers involved a several steps as described below:

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[27]Bachelor of Medicine and Bachelor of Surgery (MBBS)/allopathic [modern system of medicine] doctors, either from the private sector or government clinics contracted for their off-duty hours.

- A preliminary meeting was held with the local NGO to brief them on the preferred provider model of service delivery.

- The project undertook a mapping exercise to determine the location of the KPs, their health seeking behaviors, and barriers to accessing project services. Mapping also provided a list of doctors (private and government) practicing in the area.

- The NGO conducted focus group discussions and met with community members to identify which doctors from the list were known to them and trusted by the community. The NGO conducted a field assessment of the resulting list of providers based on a comprehensive list of eligibility criteria. A shortlist of eligible and trusted doctors was created.

- The NGO outreach staff and peer outreach workers met with the shortlisted doctors to explain the project and inquire about their interest in participating in the preferred provider model. Doctors who indicated a willingness to participate in the project were asked to fill out a 'Preliminary Exploratory Survey' form which assessed the doctor's skills and willingness to work with the target population.

- NGO and HLFPPT staff visited doctors who seemed suitable according to the self-assessment to verify the information in-person and to assess the private practitioner's facilities.

- A Memorandum of Understanding (MOU) was signed between the NGO and the preferred providers who were finally selected. The initial MOU covered a defined trial period, after which it was extended based on the performance of the provider. The MOU document consisted of a brief description of the program, roles and responsibilities of the stakeholders (preferred provider, NGO and state lead partner), details of payment, and a discontinuation clause that could be invoked by any of the signatories.

- The capacity building package for preferred providers included:

  - Orientation program: The STI Technical Officer from HLFPPT and a program representative from the local NGO provided orientation for new preferred providers, either on a one-to-one basis or for a small group of preferred providers. Orientation sessions were held at the preferred provider's clinic or a local program or government STI clinic and included direct patient management experience.

  - Participatory trainings on Clinic Operational Guidelines and Standards (COGS) were arranged for the preferred providers soon after they were appointed.

  - HLFPPT supplied the necessary equipment like speculum, proctoscopes, etc. to all the preferred provider clinics.

Ongoing operations: A fixed-day clinic model was used for preferred provider services. NGO static clinic staff, including a nurse and a counselor, traveled to the preferred provider's clinic on the designated days for the KP clinic hours. The NGO staff brought STI drugs and patient registers from the static clinic. The nurse assisted with internal exams, dispensed and administered drugs and conducted syphilis screening using a point of care treponemal test kit requiring finger-prick whole blood. The counselor was responsible for counseling and health education on HIV and STI, patient registration and referrals for relevant services such as HIV testing and counseling. On average, they travelled about 10-12 days each month and spent the rest of their time working at the NGO static clinic.

The project paid the preferred providers monthly for their services (initially from Avahan funding and after transition from APSACS) at a per visit rate that was in line with the National AIDS Control Organization's (NACO) guidelines. The preferred provider could see a maximum of 20 KPs per day; however, a minimum payment was guaranteed as an incentive for continuing participation in the project.

Quality assurance and improvement: Project staff provided ongoing supportive supervision and on-site mentoring visits to each preferred provider: monthly by the Project Officer of HLFPPT and quarterly by the STI Technical Officer of HLFPPT. Quality assessment was carried out using Avahan standard quality assurance and evaluation tools.[28] Areas of assessment included technical knowledge, documentation and infrastructure. Prescription audits were carried out to assess compliance with national treatment guidelines. The frequency of on-site visits was greater for new preferred providers and for providers who required more support to meet the quality standards.

For each site, the NGO project coordinator also monitored the outreach team of community guides, peer and NGO outreach workers to check whether all the KPs identified in the site were using the services. The NGO project coordinator held periodic meetings with the outreach team. Issues were either resolved at the local level or referred to HLFPPT for further support and assistance. The Regional Coordinator from HLFPPT played a major role in overseeing the successful operations of the clinics in their assigned districts.

Implementation challenges

- Identifying preferred providers was challenging. In some areas, few doctors met the project selection criteria and KPs tended to prefer non-allopathic (traditional systems of medicine) providers due to their lower fees and easy access. It was also difficult to find doctors who were acceptable to the HR-MSM/TG community and some of the doctors required additional mentoring to accept and follow the proctoscopic examination protocol.

- Setting up preferred provider services at locations that were acceptable and accessible to the KPs was a challenge. In some instances, the number of preferred doctors shortlisted by the community was high and it was a challenge to reach an agreement on selection of the most suitable candidates from the list.

- Preferred providers were reluctant to attend workshops for STI management training due to loss of income during the time spent in training, low motivation, low perceived need for training, and long travel distances. This is discussed further in the section on "Lessons Learned" below.

- Monitoring and supportive supervision for the quality of services at the preferred provider clinics and implementing standardized services across the preferred provider clinics was a challenge. Coordinating travel and logistics for supportive supervision field visits by doctors from the NGO and HLFPPT was sometimes difficult. Involving preferred providers in improving the quality of care was a challenge as there was no incentive for them to participate.

Lessons learned

- Plans for capacity building activities need to accommodate the limited time and commitment of private providers. The project developed several strategies to increase participation of private doctors, including:

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[28]See Chapter 3 and Annex A.1 for more information on tools used for monitoring quality of care in the Avahan project.

– The training agenda and curriculum were structured to accommodate shorter training sessions and promote more effective learning. Training was sometimes split into short sessions (e.g., 4 hours) on separate days.

– Training was arranged at locations near preferred providers to reduce the time spent in travelling.

– Training was conducted in small groups for effective facilitation and to encourage active participation from providers. In some cases, one-on-one training sessions were provided in the preferred provider's clinic.

– Refresher trainings and meetings to share experiences among preferred providers were held frequently. Doctors were briefed on the latest technical and programmatic updates and had the opportunity to share experiences of successes as well as challenges.

– Training and other capacity building activities were planned well in advance and only after consulting with the preferred providers on their availability. This gave the doctors enough time to plan their work schedules.

• The success of the preferred provider model depended on the performance of the outreach team to create demand for services within the community. In order to meaningfully involve the outreach staff, good coordination between the provider and the outreach team was essential.

Outcomes

The preferred provider model increased STI clinic accessibility for KPs in remote areas. Feedback from the community indicated less perceived stigma associated with preferred provider clinics. Overall, the quality of counseling was found to be better than the outreach health camp model of service delivery as preferred provider clinics provided audio and visual privacy, which was not possible at health camps.

The longer the preferred provider clinics were in existence, the more acceptable they became to the KPs, and the number attending these clinics increased (See *Table 2.4* below). For example, the preferred provider clinics that were established in May or July 2008 had more cases by the end of December 2008 than those which started in October or November of that year.

The costs involved in setting up this alternate model of service delivery were lower than for static clinics. This model had the potential to be a sustainable alternative to other models of clinical service delivery as the planning and processes involved in starting the clinics was led and managed by the community with the help of community guides and peer outreach workers.

Table 2.4. Cumulative STI clinic service uptake from Swagati Project preferred provider clinics in 2008 (Source: Swagati Project monitoring data).

Area	No. of clinics	Start date	Number of registered KPs	Number of clinic visits
Krishna	15	July-08	1,435	2,566
EGV	3	Nov-08	224	99
Guntur Nestam	7	Nov-08	695	1,266
SVDS	2	Oct-08	272	149
SVDS	4	Oct-08	286	101
WGV AFD	8	July-08	696	1,432
WGV Nestam	3	Dec-08	173	99
RES FSW	4	May-08	341	1,333
RES MSM	4	May-08	338	1,410
Total	50		4,460	8,455

Sexually Transmitted Infections (STI) Care and Treatment

Chapter 3

Sexually Transmitted Infections (STI) Care and Treatment

STI clinical services involve syndromic management of symptomatic STIs, as well as management of asymptomatic infections. Services should be effective and of high quality. To be acceptable to key populations, services must be delivered with respect, privacy and confidentiality and address their specific needs.

Periodic screening for STIs is recommended by WHO as a cost-effective intervention to reduce STI prevalence, as well as complications of untreated STIs, such as pelvic inflammatory disease, infertility and congenital infections (WHO 2012, WHO 2013a). Regular medical check-ups were recommended for screening of asymptomatic STIs on a quarterly basis for all key populations in the Avahan project and included the following services:

- History-taking and physical examination

- Treatment of symptomatic STIs according to national guidelines, using syndromic management flowcharts and laboratory diagnosis where available

- Presumptive treatment for asymptomatic gonococcal and chlamydial infections at the first visit and repeated if sex worker has not attended clinic for six months

- Semi-annual serologic screening for syphilis with treatment

- Counseling and education

- Referral for HIV testing and other services, as needed

Box 3.1 provides more details of the essential STI service package in Avahan-supported clinics. Services were also linked to HIV testing and counseling, sexual and reproductive health and other primary care needs (see Chapter 4 for more details).

> **Box 3.1.**
> ## Components of STI case management in Avahan-supported clinics (FHI 2007)
>
> - Sexual health history-taking
>
> - Adequate and appropriate physical examination, including a speculum and bimanual examination of the genital tract for all female patients and rectal examination (including proctoscopy) for patients practicing receptive anal sex
>
> - Recommended laboratory tests:
>
>   - Basic microscopy (Gram stain for vaginal and cervical specimens and wet-mount slide preparation for vaginal specimens)
>
>   - Vaginal pH testing
>
>   - Syphilis serology (on-site quantitative RPR or VDRL and referral for TPHA for positive syphilis serology)
>
>   - Where on-site laboratory services are not available, arrangements should be made with a referral laboratory to provide routine syphilis serology
>
> - Appropriate and immediate treatment and counseling of every patient, including the "four Cs" (Condom demonstration and promotion, ensuring Compliance with treatment, Counseling, and Contact treatment/partner management)
>
> - Follow-up care
>
> - Referral network for services not available at the clinic (e.g., referral for syphilis testing if it is not available on-site, family planning and for HIV testing and counseling)

Development of standardized guidelines and tools

The management of STIs among key populations differs from the general population due to their higher risk for STI and HIV and different behavioral risk factors. Management guidelines and flowcharts specific to key populations are required to adequately address their needs.

At the outset of the Avahan program, Indian national STI guidelines recommended syndromic management for symptomatic STIs, but specific protocols for symptomatic and asymptomatic STI management among female sex workers (FSWs) and high-risk men who have sex with men (HR-MSM) were not available. In 2005, approaches for STI prevention, detection and care and standards of service delivery tailored to key populations were developed and presented as the *Avahan Clinic Operational Guidelines and Standards* (FHI 2007). The standards were developed through a consultative process that incorporated participatory assessments, field experience, existing national guidelines and international best practices.

The *Clinic Operational Guidelines and Standards (COGS)* detailed an STI service package for key populations (KPs) for management of symptomatic and asymptomatic infections in conjunction

with peer outreach and community participation. The manual addressed STI clinic operations (set-up, staffing, community involvement, coordination with outreach, logistics support); clinical management with detailed protocols and standards; health education and counseling; laboratory support; infection control; ethical standards, confidentiality and right of refusal; monitoring, evaluation and reporting; and technical support and supervision. Recommendations for counseling of KPs and HIV testing and referral linkages, including HIV related support services, were included. The *COGS* formed the basis for training and supervision, and served as a benchmark against which the performance of clinics was monitored.

The first draft of the *COGS* was circulated in early 2005 and then finalized in 2007 after incorporating feedback and experiences from the lead partners regarding pre-packaged color-coded STI treatment kits, community involvement mechanisms and bio-medical waste management systems. Additionally, a reduced frequency of presumptive treatment was recommended after the first round (2005-2007) of the Avahan Integrated Biological and Behavioral Assessment (IBBA) showed an overall low prevalence of gonorrhea and chlamydia in most districts of the six states (ICMR and FHI 2007). The Avahan STI capacity building partner also provided technical support to the National AIDS Control Organization (NACO) for adapting the *COGS* for the national STI guidelines.

Box 3.2.
Additional tools developed to support STI clinical services.

STI Clinic Handbook, a summary of the clinic operations and clinical case management, was developed as a quick reference for clinic managers and health care providers

STI Clinic Supervisory Handbook, described the principles and processes of supportive supervision, and use of monitoring data to improve clinic performance. It was developed with the aim of helping supervisors work together with clinic staff to provide the best possible services for key populations.

Guidelines and Standards for Counseling High-Risk Groups in Clinic Settings, provided detailed guidelines and checklists for STI counselors. Its aim was to ensure quality STI counseling in static and outreach clinics and supplemented the COGS and NACO HIV Counseling Guidelines.

Training of health care providers

Well-trained and non-judgmental health care providers are the key to high quality and acceptable services for KPs. The organizational structure of Avahan was well-suited to training. The STI capacity building team developed the training materials and trained the state lead partner STI coordinators, who in turn trained NGO clinic staff. When requested, the STI capacity building partner also provided technical support for training the NGO clinic staff, private preferred providers, and government doctors according to the different service delivery models (described in Chapter 2).

FIGURE 3.1. Avahan *Clinic Operational Guidelines and Standards (COGS)*

Training for prescribers was based on the *COGS* and WHO syndromic management training modules, which were adapted to the specific needs of KPs. Additional areas of training that were added included sensitization to the health needs of KPs, setting up community-friendly services, and management of ano-rectal STIs. For the lead partner working in the states of Manipur and Nagaland whose target population were primarily people who inject drugs (PWID), additional training sessions and monitoring tools were developed on injection-related abscess management. The *COGS* training was also adapted for the state lead partner working with bridge populations (truckers).

Working with KPs was a new experience for health care providers, many of whom shared general misconceptions and negative views of FSWs, HR-MSM and transgenders (TG). During field visits after the initial *COGS* training, the STI capacity building partner noted mutual embarrassment among clients and physicians about discussing personal sexual issues and risk behaviors of HR-MSM and TG. Providers were unable to understand local slang used by HR-MSM for their self-identities and risk behaviors, contributing to the communication gap. Clinical examinations were rarely performed due to the reluctance of clients to undergo internal examination and the limited experience of physicians in conducting them, especially for proctoscopic examinations among HR-MSM. The sensitization training was developed to address: sexuality issues; history-taking for HR-MSM/TG-specific behaviors; oral, speculum and proctoscopic examinations; common ano-genital problems among TG and HR-MSM; and health education and counseling specific to their lifestyles. An important aspect of the training was to demystify sexual behaviors and to promote a respectful attitude toward HR-MSM/TG as individuals during clinic visits. *Box 3.3* describes a sexuality matrix exercise as an example of the type of exercise conducted during trainings to promote understanding and respect for HR-MSM among health care providers.

In addition, a customized training for STI counselors working at KP clinics was conducted. The training curriculum included counseling guidelines and standards, establishing and managing referral systems, ethical standards and documentation.

Supportive supervision and quality monitoring

Supportive supervision was a key component of the Avahan project and contributed to its success. A two-tiered supervisory system was developed early in the project. At the state lead partner level, each STI coordinator was responsible for 10-15 clinics, which s/he visited monthly with the objectives of capacity building and problem-solving. STI capacity building staff visited lead partners at three-month intervals, during which joint supervisory visits were made to about 10 percent of the NGO clinics. The primary purpose of these visits was to reinforce the capacity of STI coordinators to provide support and supervision to frontline service providers, rather than to attempt to provide that support directly.

Box 3.3.

Training exercise designed to improve communication and health provider attitudes toward HR-MSM

'Sexuality Matrix' Exercise

In the tabular column heading, the terms 'heterosexual men,' 'homosexual men' and 'bisexual men' refer to those men whose sexual orientation are hetero, homo and bi – respectively. Read the row against the column and if you agree with the statement mark "+" for 'Yes' and "-" for 'No.' Don't mark according to what you think is ideal or morally right but what is _possible_ with regard to at least some proportion of men of any sexual orientation. If you have any queries ask your facilitator. Later, we will have a group discussion to discuss the answers.

	Men with Heterosexual orientation	Men with Homosexual orientation	Men with Bisexual orientation
Loves or sexually attracted to	opposite-sex person	same-sex person	both sexes
May have sex with same-sex person			
May have sex with opposite-sex person			
May be 'masculine'			
May be 'feminine'			
May have anal sex (peno-anal)			
May not want to have anal sex			
May have oral sex (peno-oral)			
May not want to have oral sex			
May have peno-vaginal sex			
May be monogamous (single partner)			
May have multiple partners			
May rub against a person (without consent) in a bus or train			
May have sex with a person in public places (park, beach, etc.)			
May have sex with another person without consent (rape)			
May have sex with an adult, with consent, in a private place			
May sexually abuse a child (male or female)			
Might have been sexually abused by a male as a child			
May get married to a female			
May live together with a sexual partner			
May receive money to have sex with a person			

May pay money to have sex with a person			
May watch cricket			
May be living with mother, father, and sister/brother			
May be a 'good' person			
May be a 'bad' person			
May belong to "upper socioeconomic class"			
May belong to "lower socioeconomic class"			

Source: Training on Sexual Health Care for MSM and TGs, FHI 360, 2006

The STI capacity building partner developed a supervision handbook and a quality monitoring tool (see *Annex A.1*) which was used during the visits to NGO clinics. The STI coordinators were trained on the quality monitoring tool, a supportive approach to supervision, communication skills (how to give feedback and manage discussions) and interpretation and use of monitoring data for program improvement.

The STI quality monitoring tool was based on the standards specified in the *COGS*. The tool assessed five performance areas: 1) clinic statistics; 2) clinic infrastructure, supplies, documentation and client-provider interactions; 3) referral systems for prevention to care continuum; 4) community participation; and 5) frequency of technical support by lead partners. Clinic statistics and yes/no answers were assigned numerical scores ranging from 0-5. The figure below shows the increase in quality of clinical services over time (Mogasale et al. 2010).

During the supervisory visits, the STI capacity building staff documented their observations. The observations – both strengths and challenges – were discussed with the clinic staff and STI coordinators at the end of the visit, and participatory planning was carried out for addressing challenges. The STI capacity building partner also generated a technical report and recommendations after the clinic visit, which was shared with the lead partners and NGO staff.

FIGURE 3.2. Quality of overall STI services measured from 292 clinic visits using quality monitoring tool with scoring range of 0-5 (Mogasale et al. 2010)
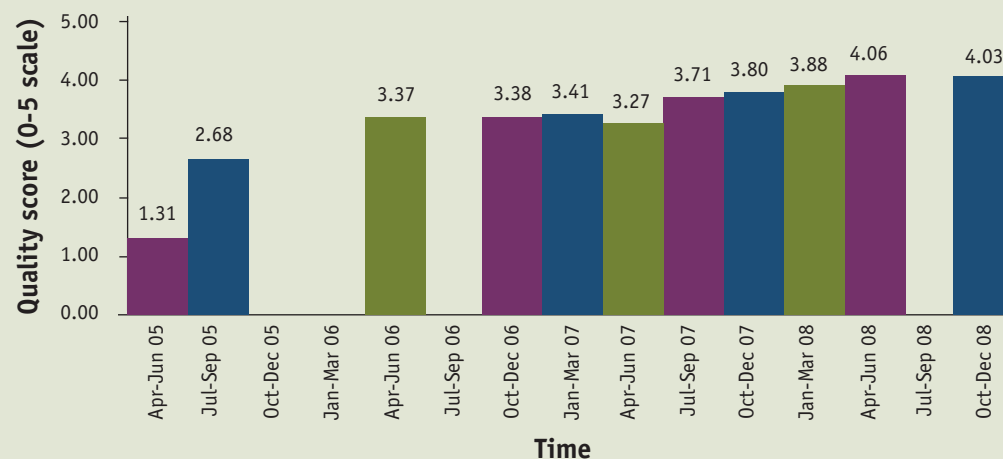
One area of particular concern for the overall quality of STI services was the low coverage of syphilis screening. Syphilis screening and management were part of the initial standardized guidelines and algorithms specified in the COGS. However, in many of the project-owned clinics, syphilis screening was not carried out because the required infrastructure and staff skills (e.g., venipuncture, laboratory testing, quality assurance/control, universal precautions, and laboratory commodity management) were beyond the expertise and experience of most implementing NGOs. Where syphilis screening was initiated, the initial strategy was to offer on-site phlebotomy with either on-site or off-site laboratory testing using non-treponemal tests such as Rapid Plasma Reagin (RPR). Confirmation of positive results by treponemal tests was done at an off-site laboratory. However, the operational complexities, the long waiting period for results, and the fear of venipuncture by KPs resulted in low uptake of syphilis screening and significant losses in follow-up. After the results of the first round of the cross-sectional bio-behavioral evaluation survey in 2007 indicated a high prevalence of syphilis among KPs, a project-wide effort was made to expand syphilis screening and treatment, described in *Box 3.4.*

Box 3.4.

Syphilis screening: responding to the challenge

To respond to the low coverage of syphilis screening combined with survey data indicating a high prevalence of syphilis among key populations, a project-wide effort was made to expand syphilis screening and treatment. Communication materials describing the process and benefits of syphilis testing and differentiating syphilis testing from HIV testing were developed. After training peer outreach workers on communication about syphilis testing and treatment, the KPs were motivated for syphilis screening during routine outreach activities and clinic visits. Physicians were also re-trained in the management of anaphylactic reactions resulting from use of injectable penicillin for treatment of syphilis, a major concern in the medical community in India. To address the operational complexities of blood sample collection and off-site testing, a rapid, treponemal, point-of-care (POC) syphilis test using finger-prick whole blood was introduced at sites where RPR testing was not available or feasible. Algorithms were developed for use of the POC tests as the initial screening method, and for those testing positive, off-site RPR testing was recommended for prognostic titers and as a baseline for future screening.

POC syphilis tests were successfully used at both static and outreach clinics. They were first introduced by Project ORCHID in the North East states in late 2007. POC screening was initially conducted through "blitz camps," outreach clinics combined with intensive communication campaigns, to screen PWID in one high prevalence rural district. Based on the success of the campaign and the high uptake of screening, the POC syphilis tests were later incorporated into the routine clinic services package and expanded to additional districts. Data from another state lead partner showed that rates of syphilis screening increased from 14.3% to 63.1% per quarter after introduction of POC at sex worker sites in Mumbai, India's largest city. (See **Case study 3.3** for more details.) The second round (2009-2010) of the bio-behavioral evaluation in three southern states showed a significant decline in syphilis prevalence (AOR 0.4, P<0.001) among FSWs from 10.8% (in the first round) to 5.0% (Adhikary et al. 2012).

CASE STUDIES

The following three case studies describe the experiences of state lead partners (SLPs) that led to improvements in STI clinical services:

Case study 3.1: "Is that all?" Promoting acceptance of regular STI check-ups describes a campaign to establish health care seeking behavior as a community norm and increase acceptance and uptake of regular medical check-ups. The campaign focused on symptom recognition and early treatment, the benefits of regular wellness check-ups, demystifying internal examinations among key populations, and training health care providers to conduct examinations in a skillful and respectful manner.

Case study 3.2: Pre-packaged color-coded STI treatment kits to improve syndromic STI management describes the overall project experience with introducing pre-packaged and color-coded STI treatment packs to improve correct prescribing for syndromic STI management.

Case study 3.3: Syphilis screening campaign using rapid test kits provides more detail on the successful introduction of point-of-care rapid syphilis tests for screening of over 30,000 sex workers over a three-month period in both static and outreach clinic settings.

CASE STUDY 3.1: "Is that all?" Promoting acceptance of preventive STI check-ups

This case study describes a campaign, entitled "Is that all?"[29] to promote acceptance of preventive STI check-ups and internal examinations among key populations.

Target Population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG)
Location: Tamil Nadu, South India
Lead partner: The Tamil Nadu AIDS Initiative (TAI) project, Voluntary Health Services (VHS)

Background

One of the most important components of STI services in the Avahan project was the regular clinical screening of key populations (KPs) for STIs. Clinics and peer outreach workers promoted quarterly regular medical check-ups for asymptomatic KPs to detect signs of STIs. Regular medical check-up visits by KPs to project clinics entailed among other things: general physical examination; external genital and peri-anal examination; speculum and bimanual examination in women; and proctoscopic examination in males, females, and TG where indicated. Peer outreach workers provided health education on STI symptoms to KPs and advised them to attend the clinic. However, promoting the concept of preventive check-ups including internal examination was challenging, requiring particular sensitivity and skills. Many KPs felt anxious about internal examinations, especially if it was their first examination, if they had had a prior negative experience, or if there was a negative perception about the procedure in the community. The '*Is that all*?' campaign was initiated in 2006 to promote regular medical check-ups and internal examinations.

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[29]'Is that All?' was the title of a video used by project staff to educate KPs about internal examination and allay their fears around it. We have used the phrase in this case study to describe the activities implemented by TAI and its partners to demystify and normalize internal examination.

Intervention components

The project adopted a multipronged approach to promote regular medical check-ups and internal examination among KPs. Staff commitment and ownership was ensured by first sensitizing the clinic and outreach staff, including managers, clinic staff, community liaison officers[30] and peer outreach workers, on the rationale for regular medical check-ups and internal examination and its importance in STI care, even for asymptomatic clients. The approach emphasized that a regular medical check-up is incomplete without internal examination, and the entire project team delivered this message in all their interactions with community members - during outreach, clinic visits, community meetings, and informal meetings.

The project encouraged KPs to avail free services at clinics to improve wellness. Regular check-ups and internal examination were projected as one of the positive features of the program, thereby creating a positive view about the procedure in the minds of the community members.

The project staff, especially the outreach team, addressed community beliefs and misconceptions by interacting with the community members to remove perceived barriers to having regular medical check-ups and internal examinations. Project staff and KPs participated in joint problem-solving sessions to find solutions that were locally and culturally relevant. Project staff was then able to include appropriate messages and key information in their communication with community members to promote regular medical check-ups and correct misconceptions.

Drop-in centers (DICs) were used to conduct 'orientation' sessions for community members. DICs, located within a static clinic, were used for counseling sessions and behavioral interventions conducted through inter-personal communication (IPC) sessions and materials such as audio, video and posters. Doctors and nurses from the clinic also visited the DIC from time-to-time to conduct/participate in these sessions. A short video film titled 'Is That All?' was screened at the DIC, which featured the clinic staff (including doctors) and included testimonials from community members who had undergone an internal examination.

Outreach staff also promoted regular medical check-up and internal examination through dialogue-based IPC. Peer outreach workers and community liaison officers acted as role models by undergoing internal examinations at the recommended frequency. The project staff ensured that their decisions to undergo internal examination were informed and voluntary.

The project undertook various other steps to improve acceptance of internal examination. Clients were asked for verbal consent before performing the procedure and doctors and nurses explained the examination procedure to the client before they lay down on the examination table. This allowed the client to feel in control and allayed their fears about the procedure. When patients described a prior negative experience, the project staff worked to minimize discomfort. Language and techniques used avoided sexual innuendos and maximized patient control and comfort (e.g., positioning on the table was done through minimum physical contact). Doctors and nurses respected client modesty, spoke in a reassuring manner, and alerted clients of examiner and instrument touch before they occurred.

Only trained and skilled staff elicited sexual and reproductive health history, performed examination and carried out client management. The project ensured that providers had sufficient

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[30]The role of community liaison officers is described in **Case study 1.2: Creating a community empowerment model.**

time to take their history, perform the physical examination (including speculum examination for women and proctoscopic examination where relevant), diagnose, prescribe treatment, and explain the treatment to the patient. Clinicians were expected to spend a minimum of 15 minutes for a routine sex worker visit at a static clinic site and 10 minutes for a visit at a mobile clinic site. The clinic maintained its equipment in a good working condition.

Clients were always requested to wait in the registration area or DIC, and not inside or directly outside the examination room. The clinic infrastructure allowed sufficient physical and auditory privacy and confidentiality of patient interviews. This required adequate size and arrangement of registration areas, consultation and examination rooms.

Implementation challenges

The main challenge was that it took a longer time than originally envisioned to convince the community of the benefits of preventive check-ups and the role of internal examination. It was a gradual process that required patience and persistence from the entire team.

Lessons learned

- Clinic staff, NGO outreach staff and peer outreach workers who were community members themselves played a key role in convincing KPs about the importance of regular medical check-ups and internal examination.

- Close collaboration between the clinic team and the community was important to ensure successful implementation of the campaign. By spending time in the community with NGO outreach staff and peer outreach workers, the clinic team was able to understand the difficulties faced by the KPs in the clinic, their perceptions of clinic activities and procedures, and assess the effectiveness of outreach activities and community satisfaction with clinic operations. It was essential to address issues in a timely manner to maintain and increase community attendance at the clinic and willingness to undergo internal examination.

- It is important to emphasize to health care providers that physical examination should be performed skillfully with respect and cultural sensitivity. The internal examinations also need to be appropriate, such as offering proctoscopic examinations to only those clients who give a history of receptive anal sex.

Outcomes

The number of KPs who visited the clinics for a regular medical check-up and underwent internal examination increased over the years after the start of the campaign. Refer to *Table 3.1* and *Figure 3.3* to see the data from the TAI clinics.

Table 3.1. Regular medical check-up visits at TAI clinics from 2005-2009 (Source: Avahan individual tracking data)

	2005	2006	2007	2008	2009
FSWs	2,388	17,935	41,429	44,938	42,369
HR-MSM	1,275	7,038	13,197	13,048	14,629
TG	273	1,068	1,642	1,741	1,935

FIGURE 3.3: Increasing proportion of internal examination during regular medical check-ups
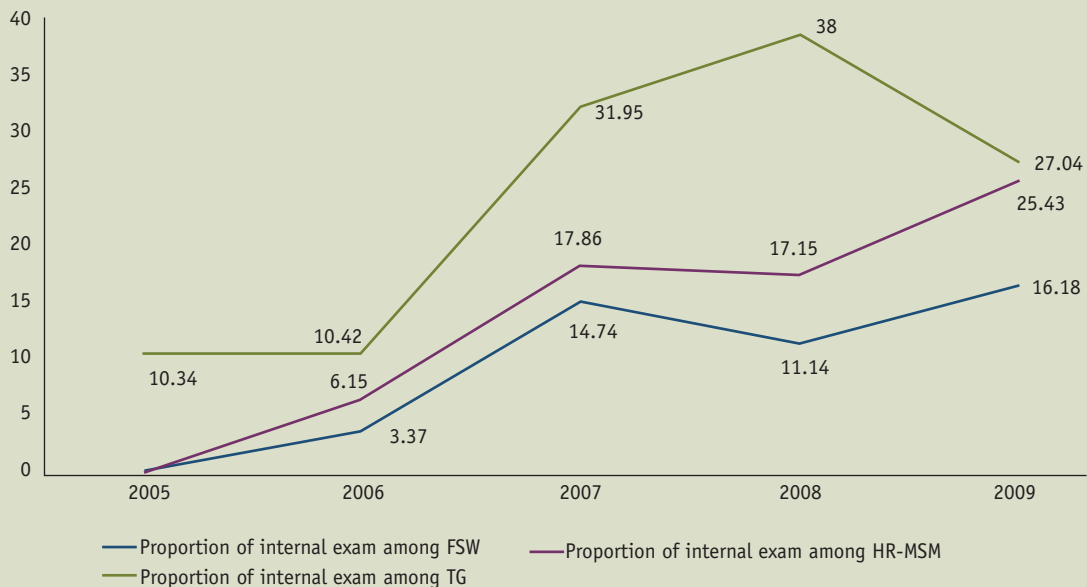
(Source: Avahan individual tracking data)

CASE STUDY 3.2: Pre-packaged color-coded STI treatment kits to improve syndromic STI management

This case study describes the Avahan partners' experiences with using pre-packaged color coded STI treatment kits to ensure correct treatment for STI syndromes

Location: Multiple sites

Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM), transgenders (TG), truckers and men at risk in commercial sex settings

Lead partners: This case study captures the experiences of projects implemented by four state lead partners (SLPs) of Avahan: Karnataka Health Promotion Trust (KHPT) in Karnataka, India HIV/AIDS Alliance in Andhra Pradesh, Population Services International in the four Avahan states in southern India, and the Transport Corporation of India Foundation along national highways.

Background

Early diagnosis and treatment of STIs is an essential component of STI control programs. A key feature of syndromic case management is the ability to effectively treat STIs based on the recognition of easily identifiable groups of symptoms and clinical findings, referred to as "STI syndromes." However, treatment is more complex. The lack of a specific diagnosis requires the prescription of two or three antibiotics for an STI syndrome, each requiring different dosages and durations of treatment. Despite training workshops and provision of practice aids for easy reference, studies indicate that patients often do not receive the correct and complete treatment.

A survey to collect baseline information on the quality of STI case management by health care providers showed that only six percent of allopathic doctors[31] were prescribing correct syndromic drugs in the right doses and duration as per the national guidelines (TNS Mode and FHI 2001). These findings were similar to those of prescription audits of health care providers in several African countries where few patients received adequate doses of antibiotics, and in many cases an incorrect drug was prescribed. The Avahan project drew on the African experience of improving STI antibiotic prescribing through training and the introduction of pre-packaged treatments. Studies from clinics in South Africa showed that syndromic treatment kits improved correct and adequate treatment of STI syndromes at a reasonable cost (Colvin et al. 2006). Another study from Uganda showed that social marketing of pre-packaged treatment for men with urethral discharge resulted in greater patient adherence and higher self-reported cure rates (Jacobs et al. 2003).

Intervention components

Key populations: One of the critical steps taken by partners in the Avahan program was to simplify the treatment of STIs for both health care providers and clients by using pre-packaged color-coded STI treatment kits. KHPT had used pre-packaged STI treatment kits for other programs prior to the Avahan program. KHPT and India HIV/AIDS Alliance began using pre-packaged STI treatment kits early in the Avahan program. These experiences were used for standardizing STI treatment packs in the Avahan *Clinic Operational Guidelines and Standards (COGS)* as shown in *Table 3.2*. SLPs also made local evidence-based adjustments to the kits. For example, based on a study showing that 10%-12% of cases of urethral discharge in their population were due to *Trichomonas vaginalis*, KHPT developed a separate treatment pack for urethral discharge that included metronidazole in the first-line treatment.

Table 3.2. STI syndrome treatment packs based on treatment guidelines in the Avahan Clinic Operational Guidelines and Standards (COGS)

Pack number	STI syndrome(s)	Drugs and dosages
1	Urethral Discharge Vaginal/cervical Discharge Ano-rectal Discharge Presumptive Treatment	Cefixime 400mg single dose AND Azithromycin 1g single dose
2	Vaginal Discharge	Metronidazole 2g single dose AND Fluconazole 150mg single dose
3	Genital Ulcer Disease - Non-Herpetic	Inj. Benzathin Penicillin 2.4 million units AND Azithromycin 1g single dose
4	Genital Ulcer Disease - Herpetic	Acyclovir 400mg TID for 7 days
5	Lower Abdominal Pain	Cefixime 400mg single dose AND Doxycycline 100mg BID for 14 days AND Metronidazole 400mg BID for 14 days
6	Persistent Urethral Discharge	Metronidazole 2g single dose

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[31]Doctors who are trained in the modern system of medicine, also called as Western medicine or evidence based medicine.

The SLPs were free to decide on the color-coding and design of the packs but kept the numbering. SLPs procured the STI drugs centrally. They were packaged by the supplier (or sometimes by the SLP) and distributed to the NGO/CBO partners.

FIGURE 3.4. Color-coded STI treatment packs from India HIV/AIDS Alliance

Men at risk in commercial sex settings: Population Services International, which provided services through a branded network of private providers known as Key Clinics, developed a treatment kit for male urethral discharge, known as ACT 1. The kit contained the appropriate antibiotics (azithromycin 1g, single dose and cefixime 400 mg, single dose), condoms, partner notification forms and an insert with key health messages for the patient. Population Services International contracted a drug supplier to produce the kit to their specifications. ACT 1 was socially marketed through the Key Clinics network and was later also supplied to the Transport Corporation of India Foundation clinics. The ultimate price to the consumer was INR 50 (less than US $1), which was lower than the market price of the drugs at the time (*See Box 3.5*).

Lessons learned

- Pre-packaged treatment kits provided the correct drugs in adequate doses for the STI syndrome and thus improved prescribing by health care providers.

- The pre-packaged kits do not require a new service delivery structure or a parallel mechanism to be introduced into the existing health care services.

- The PSI experience showed that it is possible to distribute these kits through social marketing, especially with generic drugs, making it affordable to the general public and cost-effective compared to existing treatment structures.

Outcomes

Although supporting data are not available, the feedback from SLPs suggested that introduction of the color-coded STI syndrome treatment packs was met with high levels of both patient and provider satisfaction and resulted in easier management of the essential STI drug supply.

Based on the success of the Avahan experience, the National AIDS Control Organization (NACO) introduced pre-packaged color-coded STI treatment kits in the national program in 2007 (NACO 2007b). Under the national program, the STI kits are given free of cost to STI patients attending all public health facilities including medical colleges, district hospitals, and community and primary health centers. These kits are also supplied free of cost to key populations attending NACO-supported targeted intervention static and preferred provider clinics.

Box 3.5.
Payment for STI treatment: Transport Corporation of India Foundation experience with truckers

STI treatment and counseling were a vital part of the services provided to truckers at the Transport Corporation of India Foundation (TCIF) clinics. The project included behavior change communication activities, condom promotion and condom social marketing. While registration and consultation at the clinics were free, truckers were required to pay for the STI drugs, which were sold to them at the wholesale price paid by TCIF to the drug suppliers. The payment strategy was introduced later in the program to encourage truckers to take STI treatment more seriously. Since this was a departure from the previous practice of free treatment, clients were initially hesitant to buy the drugs. However, when they realized that they would need to pay more for the same drugs from a chemist's shop, they started buying the STI medicines from the TCIF clinics.

Within a year of introducing the payment strategy, STI treatment purchases from TCIF clinics improved from 55% to 83%. Clients were encouraged to begin treatment immediately post-purchase at the clinic premises. A key lesson from the program was that when truckers paid for their medication, they took their treatment more seriously. However, the truckers were not charged for the drugs they received for general ailments (Singh et al. 2008).

CASE STUDY 3.3: Syphilis screening campaign using rapid test kits

This case study describes the large-scale use of rapid tests to increase uptake of syphilis screening in static and outreach clinic settings.

Location: Mumbai, State of Maharashtra
Target population: Female sex workers (FSWs), male sex workers (MSW) and transgenders (TG)
Lead partner: FHI 360, Aastha Project

Background and rationale

Diagnosing and treating syphilis infection among sex workers is a key intervention for prevention of HIV transmission in the country. Recent surveillance data had found a 13% prevalence of syphilis[32] among brothel-based FSWs and 14.6% among street-based FSWs in Mumbai, and 9.1% and 4.7%, respectively, in Thane (ICMR and FHI 2007).

The essential service package for STI management in Project Aastha included syphilis screening every six months. Despite the availability of rapid plasma reagin (RPR)[33] testing at all project

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[32]RPR positive at any titer with TPHA confirmation.
[33]A non-treponemal serologic test for syphilis widely used in primary health care settings in developing countries. Though inexpensive, it requires a centrifuge machine and rotator that are not available in most settings; it takes at least one hour to complete and requires a skilled technician to correctly interpret the results. A positive test result may mean that the person has syphilis but requires confirmation with a more specific treponemal test for syphilis, such as TPHA or FTA-ABS.

clinics (static and outreach), uptake of syphilis testing remained low. Project monitoring data indicated that only 10%-15% of sex workers in the project catchment areas accepted routine syphilis screening each quarter. Based on the findings of a qualitative assessment undertaken by the project, the primary reasons for refusal of RPR by sex workers were fear of venipuncture and long waiting times for results. In addition, staff reported operational difficulties of syphilis testing at outreach sites, including poor lighting for blood drawing and the need to transport samples to distant laboratories after late night sessions.

Rapid point-of-care (POC) treponemal syphilis tests had previously been shown to be an acceptable alternative to conventional non-treponemal syphilis laboratory tests and were considered an option to address the low uptake of syphilis screening (Mabey 2006, WHO 2013b). The POC tests were well-suited to outreach clinic conditions since they could be carried out by trained non-laboratory personnel and did not require refrigeration, electricity or laboratory equipment. Since they could be performed on-site using a finger-prick blood sample, the introduction of POC tests appeared to address all of the barriers to syphilis screening using RPR identified in the assessment.

Intervention components

Aastha implemented its syphilis screening campaign using rapid POC test kits during a three-month period (December 2007 to February 2008) in Mumbai and Thane districts. Services were delivered at 15 static clinic sites, 36 satellite clinic sites, and 1,211 mobile clinics. Aastha rolled out the syphilis screening campaign as part of a broader health check-up campaign offered at all project-supported clinic sites, including static clinics, satellite clinics (scheduled times at private practitioner clinic space), and outreach clinics (conducted at houses, bars, and rooms in brothels and lodges). Services offered during the campaign included STI clinic services (syndromic case management and routine STI check-ups), blood pressure checks, and simple laboratory tests that could be done on a finger-prick blood sample. Laboratory tests included hemoglobin level and blood group determination in addition to syphilis screening (POC with RPR confirmation). All services were provided free of charge. Results were recorded on a health card that was given to the client.

Planning and outreach: Brothel owners, bar managers, pimps, and members of the sex worker community were involved in planning the campaign. In preparation for the launch, NGO outreach staff and peer outreach workers provided information to the community. They conducted education sessions and distributed promotional materials on the importance of syphilis screening and the availability of the new test that did not require venipuncture or long waiting times, was free-of-charge, and provided results on-site within 15 minutes based on a finger-prick sample. In the pre-launch stage, clinic-based staff, outreach staff including peer outreach workers distributed promotional materials and conducted interpersonal communication sessions that carried messages on the availability of the new, quick, easy- to-perform free test. The project ensured maximum coverage by opening additional mobile clinics in places which were easily accessible by sex workers.

Syphilis screening: The Syphicheck-WB test (Qualpro Diagnostics, India)[34] was used at a cost of INR 18.50 (USD 0.39) per test. The test was performed on whole blood obtained by finger-prick. Positive rapid test results were confirmed by RPR testing on-site at fixed clinics.[35]

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[34]An immunochromatographic rapid test to detect antibodies to *Treponema pallidum*.
[35]Based on WHO guidelines for use of rapid tests. It is a reversal of the usual procedure of using a treponemal test for confirmation of a positive RPR (WHO 2006).

In satellite and mobile outreach clinics, samples were transported to the fixed clinic laboratory in cold boxes and RPR testing was conducted within 24 hours after the collection of the sample. Clients who tested positive on both Syphicheck-WB and RPR were treated for syphilis with antibiotics as per the national guidelines. Sex workers who refused RPR confirmatory testing (which required venipuncture), were offered syphilis treatment based on the high prevalence of active syphilis (40.5%) among those who were positive on the rapid screening test.

Quality assurance: Clinic staff was trained on the correct use of the rapid tests. Internal quality controls were conducted for the Syphicheck-WB and RPR kits and an External Quality Assurance System was established for RPR testing, with a reference laboratory.

Challenges and lessons learned

- Convincing sex workers to visit clinics for syphilis screening was difficult in the initial stages. However introducing rapid screening tests along with general health screening in the campaign helped increase attendance at the clinics and increase uptake of syphilis screening.

- For better uptake and acceptance of the tests, planning the intervention with a broad range of stakeholders was critical. A participatory planning process ensured buy-in and continuous support from the community.

- It was important that the planning process for the campaign began well in advance. Enough time was dedicated for its promotion and planning of the logistics.

- Introduction of rapid tests increased the acceptability and feasibility of syphilis testing by directly addressing the key barriers that caused low uptake of screening in the project prior to the intervention: long waiting times for results, operational difficulties in RPR testing at mobile clinics, and the need to transport samples to distant laboratories.

Outcomes

The introduction of the rapid tests for syphilis diagnosis increased the uptake of syphilis screening in Aastha clinics over four-fold. In total, 31,395 sex workers attended clinic services during the three-month intervention period: 91.6% female, 5.6% male, and 2.8% TG. The uptake of point-of-care rapid syphilis screening was 63.1%, compared to the monthly average uptake of 14.3% at clinic sites during the preceding nine months (*See Figure 3.5*). The overall estimated syphilis prevalence among screened sex workers was 1.2% based on RPR titers>1:8, and 2.6% based on positive confirmatory RPR at any titer (Gupte et al. 2011)

Rapid point of care tests proved to be a useful cost-effective tool for syphilis screening in a large-scale HIV/STI prevention program and was feasible in a wide range of settings, including static STI clinics and mobile outreach clinics.

FIGURE 3.5: Increase in uptake of syphilis screening by sex workers attending project clinics after rapid tests were introduced in the final quarter of 2007 (Gupte at al. 2011)

Rapid tests introduced in final quarter

63.1%

14.9%   15.1%   12.8%

Mar-May 07   Jan-Aug 07   Sep-Nov 07   Dec 08-Feb 08
n = 26,538   n = 26,773   n = 27,979   n = 31,395

% clinic attenders screened for syphilis

CHAPTER 4

Continuum of Care

Chapter 4

Continuum of Care

Key populations (KPs) face barriers to access health care and supportive services in many areas that extend beyond the STI screening and treatment services described in Chapters 2 and 3. An integrated approach to service delivery makes a wider range of services available to meet the needs of KPs. As described in Chapter 3, all services should be voluntary, confidential, accessible, acceptable, affordable and tailored to the needs of specific groups. All needs of KPs cannot be met at every clinic or within every project. However, the clinic or project can assist the client in obtaining necessary services by establishing a referral network, supported by an effective referral system (see Chapter 5).

General principles to ensure user-friendly services include: co-locating services wherever possible; involving the community in all aspects of service delivery (see Chapter 1); training and sensitization of health care workers and other non-KP staff to the needs of KPs; and ensuring that law enforcement activities are not a barrier to access to services by KPs (WHO 2013a).

Avahan clinics provided a range of services tailored to KP needs. Some were offered on-site, while others were offered through an established referral network. In addition to STI treatment, services included primary health care (and pediatrics, as needed), prevention and health awareness, HIV testing and continuum of care, TB screening and treatment, sexual and reproductive health services, and mental health services. In addition, clinics provided services to address the unique needs of specific groups, including hormonal therapy for transgenders and prevention and treatment of drug and alcohol abuse (*see Box 4.1*).

Health awareness activities

Health awareness activities were carried out both in the community and at the clinics. Drop-in centers (DICs) were a key focus of health promotion activities and provided a link between the community and the clinics. The DICs were managed by the community (through a DIC committee) and were usually co-located with the static or satellite NGO clinics to make services more accessible. A range of activities was conducted at DICs, including awareness sessions on health and other

Box 4.1.
Clinic-based services component of the Avahan package of services

- Treatment of sexually transmitted infections (STIs)

- Education and counseling for STI prevention

- Primary health care and pediatric services

- Primary health care services for people living with HIV (PLHIV)

- Promotion of early detection of HIV

- Linkages to additional services, including:

  - HIV testing and counseling

  - HIV care and treatment services

  - TB treatment

  - Sexual and reproductive health services

  - Mental health services

  - Harm reduction services for people who inject drugs

  - Alcohol and substance abuse counseling and treatment

  - Hormonal therapy for transgenders

Source: *Based on the Clinical Operational Guidelines and Standards and the Common Minimum Program* (BMGF 2010a, FHI 2007).

issues of concern to KPs, meetings of local community groups (e.g., STI clinic committee), and celebration of local festivals. Some DICs also provided personal grooming services and vocational training. The DIC was a safe space where KPs could relax during non-peak business hours, bathe, watch television or simply chat. The informal and home-like environment at the DIC attracted KPs and provided an opportunity to promote clinic services.

Treatment of minor illnesses

Clinics provided free-of-cost consultation and treatment to KPs for a wide range of common ailments, such as diarrhea, upper respiratory tract infections, anemia, fever and myalgia. In residential areas with a high density of female KPs, clinics provided services for their children and stocked commonly used pediatric formulations such as oral rehydration salts, paracetamol and antibiotic syrups. Early in the project, the availability of general health services was instrumental in initially attracting KPs to the clinic and providing an opportunity for STI and HIV prevention counseling. Once the acceptance of STI services (including regular medical check-ups) was well established, the additional services provided a continuing incentive for the KPs to regularly attend clinics.

During the second phase of Avahan of transition to government support, primary health care was not included in the Indian national guidelines and budget for KP clinics. Before transitioning the Avahan interventions to government financial and management support, the clinics were advised to contact local organizations, such as Rotary Clubs, where the medicines could be procured free or at a subsidized cost to enable them to continue to offer general treatment to KPs.

HIV-related services

HIV testing and counseling and subsequent referral to lifelong care and treatment for those who test positive is an important component of clinical services. Knowledge of HIV status through HIV testing is the critical initial link for entry into the HIV care cascade. The continuum of care for PLHIV extends from HIV testing through enrollment in HIV care, antiretroviral therapy (ART) initiation, and retention in life-long ART. As with other services, KPs commonly face barriers to access to HIV testing and treatment: stigma and discrimination, inconvenient opening times for HIV testing and ART services that do not fit their lifestyle; limited awareness of the value of HIV testing and ART availability; fear of disclosure; lack of a strong social network; and feelings of shame and guilt regarding their HIV status.

HIV testing and counseling: Under the Avahan program, HIV testing and counseling was provided by client- or provider-initiated referral to government-run integrated counseling and testing centers (ICTCs)[36]. The role of the Avahan-supported clinics in HIV testing evolved over the 10-year program, starting with general awareness-raising and promotion of HIV testing, progressing to pre- and post-test counseling, to supporting and augmenting services provided at government ICTCs.

In preparation for the eventual transition of the Avahan program to government funding, Avahan-funded NGO and Community based organization (CBO) programs aligned with the National AIDS Control organization (NACO) guidelines and targets for HIV testing beginning in 2009. The referral networks were scaled up to meet the NACO recommendation for biannual HIV tests among KPs, with strengthened linkages to treatment, care, and support services for those who tested positive. To increase uptake of HIV testing and counseling, KPs were encouraged to undergo HIV testing and were accompanied to ICTCs, if needed. State AIDS Control Societies (SACS)-run mobile testing and counseling services were arranged for KPs who did not have access to government health facilities. NGOs sensitized local ICTCs to special issues related to KPs and monitored their accessibility and acceptability to the community. Peer outreach workers and clinic staff were trained and supported to educate KPs on the rationale for HIV testing and the details of ART center procedures. HIV testing and counseling referral metrics were incorporated into peer outreach workers micro-planning tools, and all providers in STI clinics offered referrals for HIV testing.

Avahan second phase data showed a four-fold increase in the total number of HIV tests among KPs, from 62,546 in 2009 to 247,633 in 2012.[37] Cross-sectional bio-behavioral surveys conducted in 2005-2007 (Round-I) and 2009-2010 (Round-II) showed an increase in HIV testing coverage among KPs. The overall proportion of female sex workers (FSWs) in four southern states who reported ever having been tested for HIV increased from 35% to 73%, and the proportion reporting having been tested in the last year rose from 25% to 60%. Among high-risk men who have sex

[36]An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center
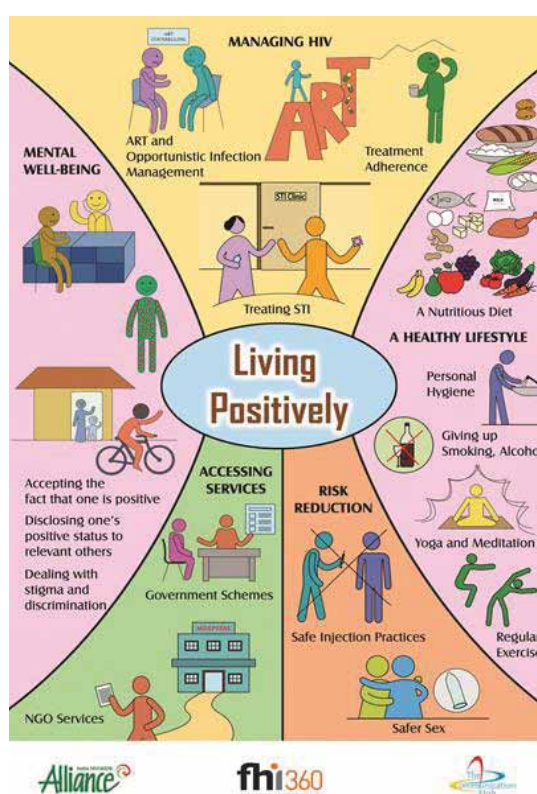[37]Avahan monitoring data on number of tests conducted. This is not the same as the number of individuals tested since it does not adjust for repeated testing.

with men (HR-MSM)/ transgenders (TG) in three southern states, the proportion reporting ever having an HIV test increased from 30% to 80%, and the proportion having been tested in the last year rose from 20% to 64% (ICMR and FHI 2011).

Linkage to care and support services: HIV-positive FSWs, HR-MSM and TG should be offered HIV care, support and treatment that is accessible, affordable and acceptable to KPs. Primary HIV care services were introduced at the Avahan clinics, and clinic staff were trained to provide cotrimoxazole chemoprophylaxis, care for simple opportunistic infections, and counseling for positive prevention. In addition, HIV-positive KPs received assistance to enroll in care and treatment services, participate in community-led support groups, and return for all follow-up visits. HIV-positive KPs who voluntarily disclosed their status to the counselor and peer outreach worker were accompanied for referrals towards ongoing care and treatment. The experiences of the Aastha project in implementing a buddy system to improve the disclosure of HIV status, adherence to ART, and retention in care is described in *Box 4.2*.

Positive prevention: To assist HIV-positive KPs improve their quality of life, the STI capacity building project developed training materials on community-based positive health, dignity, and prevention (PHDP) for FSWs and HR-MSM. CBO staff from select state lead partners (India HIV/AIDS Alliance, TAI, and Aastha) were trained in approaches for working with HIV-positive KPs. The training centered on "living positively," which included education on and promotion of risk

FIGURE 4.1. Training contents of community-based positive prevention for FSWs and HR-MSM

reduction, managing HIV, accessing services, living a healthy lifestyle and mental well-being (*see Figure 4.1*). The training materials included a facilitator's manual, pictorial training/job aids (suitable for low-literacy participants), and video interviews with HIV-positive KPs who described facing the challenges of living with HIV and how they addressed them. Currently, the training materials are being adapted to address the specific needs of HIV-positive people who use drugs (PWID) for use by CBOs in the North-Eastern states of Manipur and Nagaland.

Tuberculosis services

India is among the 22 high tuberculosis (TB) burden countries that account for 80 percent of cases worldwide (WHO 2013c). TB is the most common opportunistic infection among PLHIV in India (Tbcindia.nic.in, 2014) and one of the leading causes of death among PLHIV worldwide (WHO 2014). In addition to being at high risk for HIV infection, KPs are at increased risk for TB. Operational research conducted in high HIV prevalence states in India has shown that KPs are more likely to have TB compared to the general population (NACO and CTD 2013). People who

Box 4.2.

Ensuring continuum of care for sex workers living with HIV: the Aastha experience

Project Aastha developed a "buddy" system to link HIV-positive sex workers with ongoing care at government ART centers. Counselors encouraged sex workers living with HIV to voluntarily disclose their status to an Aastha buddy. An Aastha buddy, or *Aastha Sakhi* ("friend"), was an unpaid volunteer chosen by the FSW, and was either another PLHIV (usually from the FSW community), a member of the larger sex worker community, or a peer outreach worker.

The Aastha buddies functioned as key links in the follow-up mechanism and supported FSWs living with HIV in identifying their needs and how to best meet those needs. They were responsible for accompanying the client to the ART clinic and/or supporting the clinic counselor by following up with the client. They also assisted with pre-ART registration, ART adherence, CD4 testing, emergency visits to hospitals, monitoring side effects, legal assistance, and support in referral services. Buddies paid regular home visits, especially in instances when a sex worker living with HIV did not keep her monthly appointment at the clinic or meet the project counselor as advised.

NGO outreach staff and peer outreach workers provided support to the Aastha buddies as they accompanied their clients on referral visits. Members of PLHIV support groups who volunteered at the ART centers helped in patient education, support and referral. The referral team addressed health care needs (including positive prevention), nutrition, economic support/employment, mental health, linking with PLHIV support groups, recreation and leisure, transportation, legal assistance, spiritual support, material support, home-based care, social relationships, etc. All personnel associated with the referral arrangement maintained strict confidentiality.

Integrating the Aastha buddy system into the continuum of care model improved access to HIV care and treatment services for FSWs living with HIV. The intervention demonstrated that buddies help PLHIV understand the significance of care and treatment, strengthen follow-up, and reduce ART loss-to-follow-up. A strong referral service, dedicated staff, psycho-social support from the community, other PLHIV, and treatment buddies are essential components for empowerment and promotion of positive health, dignity and prevention among sex workers living with HIV.

inject drugs, are living with HIV, have a history of incarceration, and/or are exposed to cramped working and living conditions (including brothels) are at increased risk for TB (WHO 2013a). Early identification of signs and symptoms of TB followed by diagnosis and early treatment in groups at high risk for HIV increases their chances of survival, improves quality of life, and reduces transmission of TB in the clinic and the community. In addition, WHO treatment guidelines recommend ART for all PLHIV with TB-coinfection, regardless of CD4 count (WHO 2013d).

Box 4.3

Improving HIV care, support and treatment services for KPs living with HIV (KP-PLHIV) in Andhra Pradesh

In 2007, a program for strengthening care, support and treatment services for KP-PLHIV was piloted in a district of Andhra Pradesh by India HIV/AIDS Alliance in collaboration with its NGO partners, the Andhra Pradesh State AIDS Control Society (APSACS), District AIDS Prevention and Control Unit (DAPCU) and the district PLHIV network. In 2009, the intervention was scaled to two more districts. The specific interventions were:

- Planning and coordination between partners

- Strengthening infrastructure and personnel support: A PLHIV drop-in center was established and laboratory equipment supplied to the ART center. A community liaison officer was placed at the ART center to facilitate access to services for KP-PLHIV. In addition, if required, a laboratory technician was placed at ART centers.

- NGOs providing HIV prevention services to KPs created awareness about the program. NGOs recruited HIV positive peers to mobilize, track and provide follow-up support for KP-PLHIV.

The results showed that KP-PLHIV registered at the ART center increased from 36 percent in March 2009 to 72 percent in December 2009 as shown below. The results indicate that it is possible for HIV prevention programs to provide KP-PLHIV comprehensive HIV services through systematic referrals and strengthening health systems.

FIGURE 4.2 Increase in uptake of ART services by KP-PLHIV in three districts of Andhra Pradesh

Access to ART Services
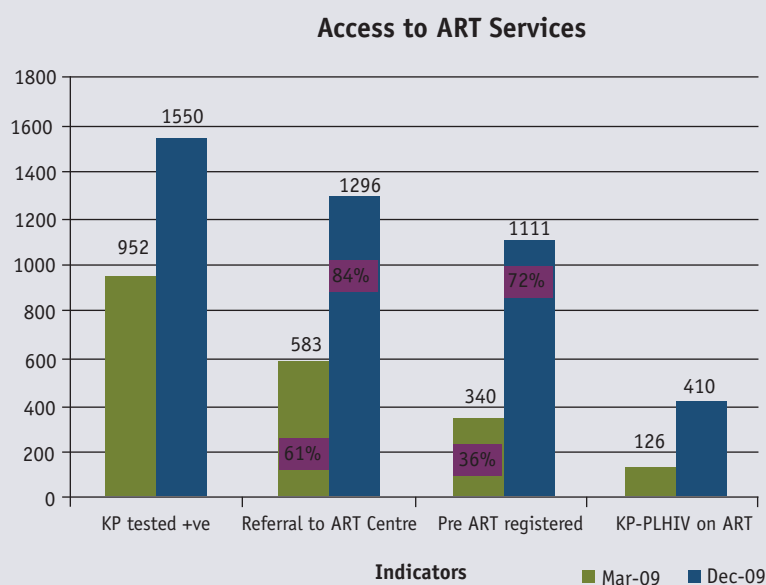
Source: India HIV/AIDS Alliance monitoring reports

KPs face barriers to access to TB diagnosis and treatment at government facilities. To improve TB services for KPs, Avahan initiated a partnership with the TB control program of India, Revised National Tuberculosis Control Program (RNTCP) for provision of enhanced TB services to KPs in 2007. Intensified case finding was conducted through verbal screening for TB symptoms during routine outreach and regular STI clinic visits. Peer outreach workers were trained and low-literate tools were developed, including visual aids such as flash cards, posters and a video. A job-aid for identifying common TB symptoms is shown in *Figure 4.3*.

Whenever possible, peer outreach workers accompanied KPs on referrals at all stages of TB screening and diagnosis: i) for KPs with symptoms suggestive of TB to attend the STI clinic; ii) for TB suspects referred to the TB diagnostic center after being screened by the clinic doctor; and iii) for KPs testing positive for TB to attend a RNTCP-supported directly observed treatment short course (DOTS)
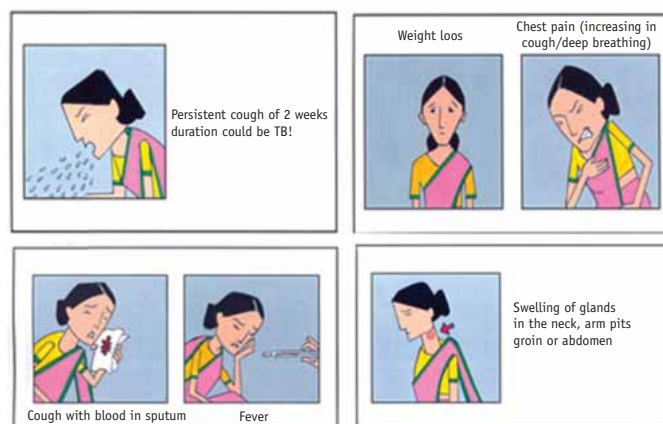
FIGURE 4.3. Job aid for verbal screening for TB symptoms

(Source: "Coming Together to Stop TB: An Interactive Training Package for Peer Educators and Outreach Workers. Avahan India AIDS Initiative, FHI 360 and The Communication Hub, 2007)

provider/center for free treatment. Some NGOs also provided additional services, such as DOTS, at their own clinics or at the home of KPs via peer outreach workers. These NGOs worked directly with the RNTCP to obtain the DOTS kits and to fulfill the RNTCP treatment reporting requirements.

The TB verbal screening activity was easily incorporated into the peer outreach workers' tracking tools, helping to ensure routine implementation during outreach visits. While peer outreach workers embraced their new role and

responsibilities, TB screening during outreach and regular reporting was most successful at sites with regular supportive supervision by the NGO managers and state lead partners (SLPs). By September 2008, all of the 116 Avahan-supported NGOs had developed working links with the district TB offices, and training had been conducted for 79 percent (391/495) of NGO-supported physicians, 83 percent (355/427) of NGO-supported nurses and counselors, and 71 percent (3,304/4,632) of the peer outreach workers. Over a period of three years, from April 2008 to March 2011, a total of 21,091 individuals were identified as TB suspects and referred to a TB diagnostic center. Of these, according to the project records, 2,278 were diagnosed with TB and 1,713 were initiated on DOTS.

Sexual and reproductive health services

All KPs have sexual and reproductive health (SRH) needs and have the same reproductive health rights as the general population. However, these needs are often not addressed in STI/HIV programs. To meet the SRH needs of KPs, a range of services are recommended (see *Box 4.4*) (WHO 2013a). The Avahan *Clinical Operational Guidelines and Standards* recommended provision of family planning and other reproductive health services through referral linkages (FHI 2007). Later in the program, counselors were also trained to provide education on different contraceptive methods. Some SLPs provided structured family planning services, as described in **Case study 4.4**, and cervical cancer screening is among the services described in **Case study 4.1**.

> Box 4.4.
> ### Recommended sexual and reproductive health services for key populations (WHO 2013a)
>
> - Family planning and contraceptive counseling
>
> - Safe pregnancy
>
> - Abortion and post-abortion care
>
> - Reproductive tract cancer screening (e.g., cervical, ano-rectal and prostatic cancers)
>
> - Counseling on hormone use and referral to other gender enhancement services for transgenders

Services for people who inject drugs

The risk of HIV among KPs who inject drugs is higher than for those who do not inject, particularly among females due to gender differences in injection practices. In addition to STI/HIV prevention and treatment services, needle and syringe programs and opioid substitution therapy (OST) should be made available for PWID.

In India, injecting drug use is most prevalent in the North-East states. Clean needles and syringes and abscess management were provided at Avahan clinics with referral for OST and overdose management. Interventions to reach women who inject drugs are described in a previous chapter in **Case study 2.2**.

Case Studies

The four case studies presented in this chapter describe the experiences of SLPs in implementing continuum of care services.

Case study 4.1: Master health check-up campaign describes a campaign to increase use of government services by KPs. The services included general health check-ups, as well as testing for STIs and HIV and cervical cancer screening.

Case study 4.2: Scaling up HIV testing for key populations describes a campaign of demand generation for HIV testing. The campaign was coordinated with the provision of on-site rapid HIV tests at outreach clinics, which were made available through a public-private partnership with the government ICTCs.

Case study 4.3: Verbal screening to improve early detection of tuberculosis describes the scale-up of verbal screening for community- and clinic-based intensified TB case finding among KPs. The intervention was part of the partnership between Avahan and the Revised National Tuberculosis Control Program.

Case study 4.4: Meeting the contraceptive needs of female sex workers describes the integration of provider-initiated family planning (FP) into HIV/STI clinics for female sex workers.

Each client's FP needs were assessed and education was provided on FP methods. Oral contraceptives and condoms were provided at the clinic with referral for other FP methods and safe abortion services.

CASE STUDY 4.1: Master health check-up campaign

This case study describes a public sector initiative to motivate key populations (KPs) to access a range of health services, including STI and HIV services, at government clinics.

Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG)
Location: State of Tamil Nadu, South India
Lead partner: The Tamil Nadu AIDS Initiative (TAI) project, Voluntary Health Services (VHS)

Background

Mapping exercises and population size estimates showed 100,000-120,000 KPs (FSWs, HR-MSM/TG and people who inject drugs) in Tamil Nadu in 2008. The Tamil Nadu State AIDS Control Society (TANSACS) along with the AIDS Prevention and Control (APAC) project (administered by VHS) and the TAI project worked closely together to implement various programs to control the HIV

FIGURE 4.4: District-wise distribution of HIV program intervention

epidemic in the state. The districts in the state were divided among these three projects to avoid duplication (*see Figure 4.4*).
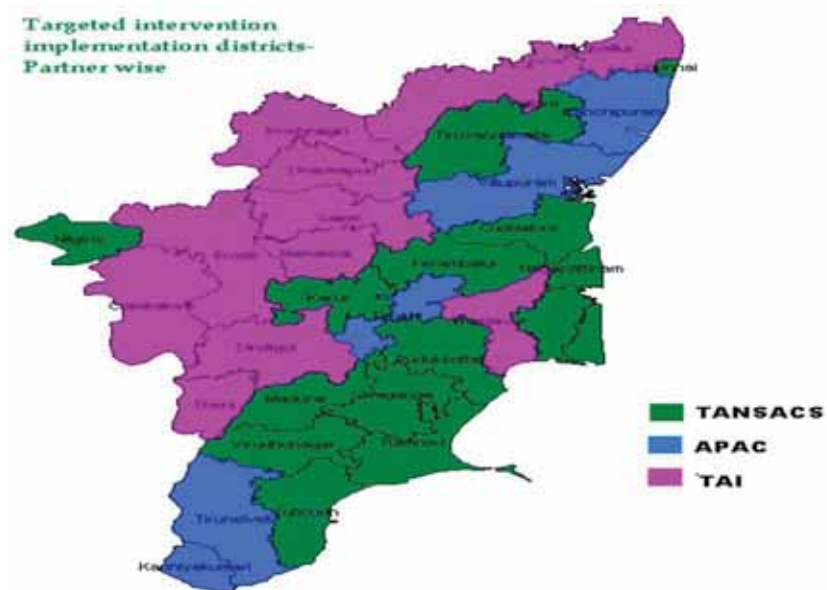
STI clinic data from TANSACS showed that only 30 percent of KPs accessed public sector STI clinic services. Reasons cited for low attendance included stigma and discrimination at government facilities; lack of facilities; long travel distances; unsuitable clinic timings; and the need for comprehensive services (other than HIV or STI services). In addition to increasing access to treatment services for STIs and HIV, there was an identified need for mainstreaming STI/HIV-related services into the existing public sector health systems to ensure sustainability of services once donor funding ended.

The Master Health Check-Up initiative was conceptualized by TANSACS to mainstream STI/HIV-related services into the existing government health systems. The initiative also aimed to address the general health-related problems of KPs in the state. TANSACS, APAC and TAI jointly implemented the Master Health Check-Up initiative between December 2009 and March 2011.

Intervention components

The goal of the Master Health Check-Up initiative was to provide health check-ups for KPs in 32 districts in Tamil Nadu as a way to motivate them to access services, including HIV testing and counseling, available in government facilities. Key strategies for this initiative were: (i) strengthening STI services in the government sector, and (ii) improving KP uptake of STI/HIV services at government clinics.

The activity was implemented in three phases:

1. *Preparatory phase* (April – September 2009): The Master Health Check-Up initiative partners worked to ensure that the necessary systems were in place. Key activities in this phase included needs assessments, identification of partners, and clarification of their roles and responsibilities. A team of technical experts developed materials and handouts to be used during the master health check-ups, including case sheets, "master health cards" (issued to clients after check-ups), laboratory labels and study questionnaires for HR-MSM and FSWs. All health care providers at the Master Health Check-Up government clinics were trained to build their knowledge and skills on the procedures for master health check-ups. Training also addressed health care provider attitudes to reduce stigma and discrimination.

2. *Pilot phase* (October 2009): The activity was piloted in three clinics.

3. *Scale-up phase* (December 2009 – March 2011): Based on the success of the pilot, the Master Health Check-Up program was rolled out to 95 government clinics that were prioritized based on location (i.e. near hotspots), existing infrastructure, and availability of required staff. VHS coordinated an advocacy process where leaders of the KP community were identified to convince other community members to visit government clinics. Realizing the need to scale up the Master Health Check-Up initiative to cover more KPs, the project identified and added 50 more facilities (district hospitals, community health centers) to the initiative. For each new facility, the team assessed the facility and strengthened infrastructure as needed to ensure delivery of quality services.

Role of NGOs: NGOs that were already implementing targeted interventions for HIV prevention played an important role in the Master Health Check-Up initiative. They provided unique IDs to clients visiting the government clinics; built rapport with heath care staff; assessed the infrastructure of government clinics; selected the appropriate timings for the initiative after consulting the community; verified KP registrations to avoid duplication; promoted government clinics in the community; and provided details of the program to outreach workers.

Clinic procedures: KPs were usually accompanied by an NGO or peer outreach worker to the clinic, where they received an outpatient ticket. At the clinic, they were registered by a counselor who provided guidance and counseling, and gave them a Master Health Check-Up card, which included all vital registration and clinical data. This helped clients and doctors during follow-up visits, and also helped NGOs keep track of individual KPs.

After counseling, the medical officer conducted a general medical check-up for the client, recording relevant details on the case sheet and the Master Health Check-Up card; examined the client for STIs; and took smears for microscopy. The medical officer also examined female clients for cervical cancer. The syndromic approach was used for management of STIs. If required, the client was referred for further examination and investigation to a specialty department within the same premises or to other higher government health centers.

Laboratory technicians collected blood and urine samples from clients and carried out general health and STI-related investigations according to a standardized protocol based on the master health check-up operational guidelines. The doctor/counselor received the results within four working days. Laboratory technicians as well as other clinic staff were trained on post-exposure prophylaxis and bio-waste disposal protocols.

Selected blood samples from the clients were also sent for research studies. These samples were used for tests like PCR for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* among FSWs. Samples were also collected as part of research studies on prevalence of viral STIs among KPs and for chronic conditions like anemia and diabetes. The package of investigations offered as part of the Master Health Check-Up is shown in the table below.

Table 4.1: Health care investigation package under Master Health Check-Up for all KPs accessing STI clinics

STI-related investigations	General investigations
RPR & treponemal tests for syphilis	Blood sugar/urea
Rapid test for HIV	Complete hemogram/ urine examination
Wet mount – *Trichomonas vaginalis* & Candida	Blood grouping and typing
Gram stain for bacterial vaginosis	Blood pressure
Screening for cervical cancer	Height and weight (BMI)
10% of the KPs underwent the following additional investigations[1]	
Rapid ELISA for hepatitis B	Rapid ELISA for hepatitis C
ELISA for HSV-2[2]	PCR for GC & CT (FSWs)

1. *Available only as part of research studies*
2. *Vaginal swabs only*

Supervision: TANSACS selected STI specialists working in medical colleges across the state as mentors, and NACO trained them to monitor the performance of STI clinics in the state. Each mentor visited his/her assigned clinics on a regular basis for on-site supervision and training. They reported to the Deputy Director, STI at TANSACS. The MA Chidambaram Institute for Health Sciences (MAC)[38] co-ordinated three rounds of mentoring visits during the Master Health Check-Up program with the help of these mentors to ensure smooth functioning of the program. MAC technical managers also provided mentoring during the clinic visits.

Implementation challenges

- The increased caseload at clinics resulted in long work hours for medical officers. In many clinics, clients experienced long wait times while medical officers finished their general outpatient department work before coming to the STI clinic. In addition, staff shortages were caused by frequent transfers of trained medical officers and staff to other departments and hospitals. The Joint Director of Health Services at the district level played a key role in addressing this problem through task sharing; nurses were trained to temporarily fill-in for vacancies in the STI clinics.

[38]Health management agency contracted for TAI clinics.

- Access to STI clinics was a challenge for some KPs. Distance to STI clinics was a barrier in some districts. This was addressed by adding three or four clinics into the Master Health Check-Up program in each district. Difficulty in mobilizing KPs to come to STI clinics during the normal clinic hours was also a challenge. Also, initial follow-up rates were poor (5% follow-up rates) at these clinics. TANSACS/APAC communicated to all their NGOs that they needed to ensure follow-up visits after seven days. Most centers reported improvements in follow-up later in the campaign.

- Many clinics reported inadequate infrastructure and stock-outs of the National AIDS Control Organization (NACO)-supplied pre-packaged STI treatment packs and HIV test kits. However, by the end of the Master Health Check-Up initiative, program mentors reported significant improvements in space, audio-visual privacy, provision of utilities, and stock supplies due to TANSACS/APAC efforts.

- Initially, mentors reported poor levels of knowledge of syndromic case management and poor documentation. M&E challenges were encountered such as incomplete forms and record-keeping, delayed reporting to TANSACS, and difficulty in adhering to the M&E requirements in the standard operational guidelines. In addition, there were reports of poor compliance with infection control measures (episodes of recapping contaminated needles, lack of segregation, and safe disposal). TANSACS emphasized the importance of universal precautions and instructed all the facilities to comply with their guidelines. Training of health care providers and provision of on-site technical support improved knowledge and skills of the STI teams and helped overcome these challenges.

Lessons learned

- Advocacy by outreach staff, key community members and peer outreach workers played a key role in allaying the apprehensions of community members and motivating them to visit government clinics at the beginning of the project.

- The simplicity of the protocols followed in the clinic facilitated the capacity-building process. Training was easy to understand and of relatively short duration. This enabled frequent trainings to be conducted in response to high staff turnover in government facilities.

- Standardized protocols ensured that patients received evidence-based and uniform care across all sites. Use of standardized treatment regimens facilitated drug and supplies management. Sensitization training of paramedical staff (nurses, laboratory technicians, reception staff) at the outset made KPs feel more welcome and comfortable attending the clinics.

Outcomes

Government STI clinics were strengthened during the period – both in terms of infrastructure and increased capacities. State government health officials ensured that adequate staff was provided to these STI clinics. Over the course of the initiative, the number of existing general health clinics providing STI services increased from 95 to 156 at the district and *taluk* (subdistrict) hospitals and upgraded primary health care centers.

Government facilities became more KP-friendly, and KPs were now able to access services without fear of stigma and discrimination. More than 47,000 KPs availed a variety of services under the Master Health Check-Up initiative between December 2009 and March 2011 (refer *Table*

4.2). Of these, more than 2,000 FSWs had abnormal screening results for cervical cancer and were referred for further management.

Table 4.2. Number of KPs who accessed services under the Master Health Check-Up campaign (Dec 2009 – Mar 2011)

Type of KP	FSW	HR-MSM	Total
Number of KPs registered by the outreach staff	55,550	32,849	88,399
Number of KPs accessed Master Health Check-Up services	28,095	19,083	47,178
Percentage of KPs accessed Master Health Check-Up services	50.58	58.09	53.37

Research: The Master Health Check-Up initiative also provided an opportunity to conduct research and provided vital data for future planning. For example, STI prevalence among KPs in Tamil Nadu was assessed with the large dataset generated through the Master Health Check-Up initiative. Also, the project worked with the National Institute of Epidemiology to conduct biological and behavioral research based on this activity.

State laboratory capacity was strengthened as a result of this initiative. Two laboratories, the Institute of Venereology at Madras Medical College and Madurai Medical College, conducted higher level laboratory tests (e.g., PCR), and were identified as centers of excellence. Additionally, four state reference laboratories were strengthened by TANSACS.

As a result of the Master Health Check-Up initiative, the stage has been set for mainstreaming STI services within the National Rural Health Mission (NRHM)[39] by establishing STI clinics at the taluk (sub-district) level primary health care centers.

CASE STUDY 4.2: Scaling up HIV screening for key populations (KPs)

This case study describes a public-private partnership with the Government of India for provision of HIV testing and counseling at NGO-run clinics and a demand generation campaign for HIV testing that coincided with scheduled outreach clinic services.

Target population: Female, male and transgender sex workers (FSWs, MSWs and TG)
Location: Maharashtra, Western India
Lead partner: FHI 360, Aastha Project

Background

Despite the benefits of knowing one's HIV status, results of the first round of the Integrated Biological and Behavioral Assessment in high prevalence states in southern India indicated that only about one-third of FSWs and high-risk men who have sex with men (HR-MSM)/TG in India had ever been tested for HIV (ICMR and FHI 2007). A 2008 study (Chakrapani et al. 2008) explored barriers to HIV testing among KPs in India and found that at the individual level, the primary barriers to testing were fear of adverse consequences if diagnosed as HIV-positive, fear of inability to cope with a positive HIV test result, not being convinced of the benefits of knowing one's HIV status, and low HIV risk perception. At the health care system level, barriers included discrimination from providers, unfriendly administrative procedures, long waiting times, and the

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[39]The National Rural Health Mission is an initiative undertaken by the Government of India to address the health needs of underserved rural areas. It provides accessible, affordable and quality health care to the rural population, especially vulnerable groups.

need to come back to collect test results. The study also identified program-level barriers, such as the inability to follow up with clients because of a lack of effective coordination between NGOs and health care facilities, and lack of media campaigns that reach out and create awareness among marginalized groups.

In the first phase of the Avahan project (2004-2009), KPs were referred to government facilities for HIV testing. However, the rate of HIV testing remained low. This was due to several factors, including restrictions on sex workers by brothel owners, madams and pimps; restricted service hours of government integrated counseling and testing centers (ICTCs)[40]; long travel distances to testing centers; and stigma and discrimination faced by sex workers from service providers. In response to feedback from the community and discussions with various stakeholders, as well as study findings that indicate that community-based voluntary counseling and testing is effective in increasing uptake of HIV testing in resource-constrained settings (Sweat et al. 2011), Aastha redesigned its HIV testing strategy in 2009.

Intervention components

Aastha introduced on-site HIV testing and counseling in the second phase of the Avahan project to increase accessibility of services for sex workers. Based on a public-private partnership model, ICTCs were set up in the Aastha project clinics in collaboration with the Maharashtra State AIDS Control Society (MSACS) and Mumbai District AIDS Control Society (MDACS). After initially integrating ICTCs in the static clinics, HIV testing and counseling services were later extended to satellite and mobile clinics.

A Memorandum of Understanding was signed between Aastha implementing NGOs and their respective State AIDS Control Societies (SACS) for the Mumbai and Thane districts to establish ICTCs in the Aastha clinics with rapid HIV test kits provided by the SACS. The ICTCs operated according to the National AIDS Control Organization (NACO) guidelines and provided HIV testing and counseling services to sex workers at convenient times for KPs.

The first ICTC was set up in February 2009, and by June 2009 all Aastha ICTCs were operational. The state lead partner (FHI 360) supported the ICTCs by providing infrastructure, training and monitoring tools such as the external quality assurance system (EQAS) and other internal reporting forms. All Aastha project laboratory technicians received training on HIV testing from qualified SACS and Aastha staff. Aastha project counselors, who were already trained in HIV pre-test and post-test counseling, received further training by SACS ICTC counselors. Counselors ensured audio-visual privacy for clients, and conducted the counseling sessions as per NACO guidelines. HIV test results from Aastha ICTCs were accepted as valid at the government-run antiretroviral therapy (ART) centers.

Vivek campaign: In order to maximize coverage of sex workers (SWs) under the project, the Aastha project implemented a campaign entitled *Vivek* ("to act thoughtfully or think rationally"). Counseling and testing services were intensified by operationalizing them in outreach settings at six-month intervals (in keeping with NACO guidelines of bi-annual HIV testing for KPs) between December 2009 and February 2012. Demand creation activities were synchronized with the timing of the HIV test availability at outreach clinics. The campaign actively promoted the benefits of HIV testing and early diagnosis among sex workers through focused communication and counseling.

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[40]An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center

During the periods between *Vivek* campaigns, ICTC services were provided as a regular project activity at the Aastha static clinics. The campaign also linked sex workers who tested positive for HIV to government care and treatment services.

The project used the Aastha Continuous Quality Approach (ACQUA) to monitor quality. ACQUA is a continuous process of setting new benchmarks in quality assurance and quality improvement when old benchmarks are attained. ACQUA was introduced during the start of the project in order to establish standards, monitor staff performance against these standards, and ensure that they were consistently and correctly applied. The EQAS and internal Clinical Quality Improvement tools were used to review ICTC services periodically. To ensure quality testing, EQAS (panel and proficiency testing[41]) based on NACO guidelines was used to determine the quality of results generated by the laboratory attached to the ICTC under the project. This involved bi-annual testing of panels and re-testing all positive tests and 10 percent of negative tests at NACO-designated referral laboratories.

The magnitude of HIV infections among individual sex workers was tracked with the help of the ICTC tracking sheet, which was also useful in the strategic planning of Aastha's overall Continuum of Care initiative. In addition, feedback from community members was used for strategic planning of ICTC services, including demand creation for these services.

The ICTC daily report, maintained by staff of the implementing NGOs, provided information on the number of SWs tested for HIV in each of the sites managed by the NGO, with a breakdown by number of new SWs tested, number of SWs who underwent repeat tests, and number of SWs who had never been tested for HIV. During *Vivek* campaign periods, the MIS officer of the implementing NGOs compiled the ICTC daily report with help from the NGO and peer outreach workers. The report provided cumulative data on the number of SWs tested daily to measure the progress of the activity and identify sites where uptake was low.

Implementation challenges

- All consumables required for HIV testing were supplied by the government. Ensuring the continuous supply of HIV test kits, gloves, needles and syringes, vacutainers and micro-tips was a constant logistical challenge.

- Changing staff responsibilities and increased demands during the intensive *Vivek* campaign periods required staff to perform duties beyond their usual day-to-day workload. The complete clinic team, including nurse, counselor and laboratory technician, was not always available for scheduled outreach clinics. The outreach team initially resisted training on the use of strategic behavioral communication (SBC) materials that focused on demand generation for counseling and HIV testing services because it was over and above routine project behavior change communication (BCC) activities. The campaign's additional reporting requirements added an extra burden and submitting the reports on time was a challenge.

- Identifying suitable locations/venues for activities as well as setting up an appropriate space in the identified site for the outreach sessions was difficult. Accurate estimates of active KPs at each site were difficult to obtain (due to sex worker mobility), which made it difficult to plan the best place and timings for outreach clinics.

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[41]Proficiency testing determines the performance of individual laboratories for specific tests or measurements and is used to monitor laboratories' continuing performance.

- The uptake of services was affected by factors beyond the control of the project staff (e.g., local festivals, holidays, school vacations, etc.).

Lessons learned

- Community outreach clinics are key to increasing the overall reach and uptake of ICTC services, but require more coordination and planning than static clinic services. The use of the ICTC tracking sheet helped plan the services and identify areas where more demand creation was needed.

- For sites where outreach clinics are not feasible, mobile vans can provide a solution. In this intervention, SACS mobile vans were hired for mobile ICTC services. The vans were also used for conducting BCC sessions during the ICTC camps.

- Initiatives such as *Vivek* can provide various benefits to KPs who avail the services, such as early detection of HIV and early linkages of people living with HIV (PLHIV) to care and support services; increased opportunity to educate and counsel KPs; and a single platform for multiple service provision [e.g. STI check-ups, HIV/syphilis screening, referral services for tuberculosis/prevention of parent-to-child transmission of HIV (PPTCT), etc.].

Outcomes

The initiative resulted in an increased number of SWs availing HIV testing services coinciding with the timing of the Vivek campaign during the period from 2009 to 2012 and was effective in identifying PLHIV sex workers in need of care and support (see *Figure 4.5*). The average number of tests conducted per month increased to 4,589 during the periods of the *Vivek* campaign as compared to a monthly average of 1,000 tests during the rest of the time in a year. Overall, 18,834 (89%) sex workers underwent HIV tests over the duration of the campaign from March 2009 to February 2012. A total of 54,252 HIV tests were conducted during this period (Bhardwaj et al. 2014).

FIGURE 4.5: HIV tests conducted during the Vivek campaign
(Jan 2010 – Feb 2012) (Bhardwaj et al. 2014)
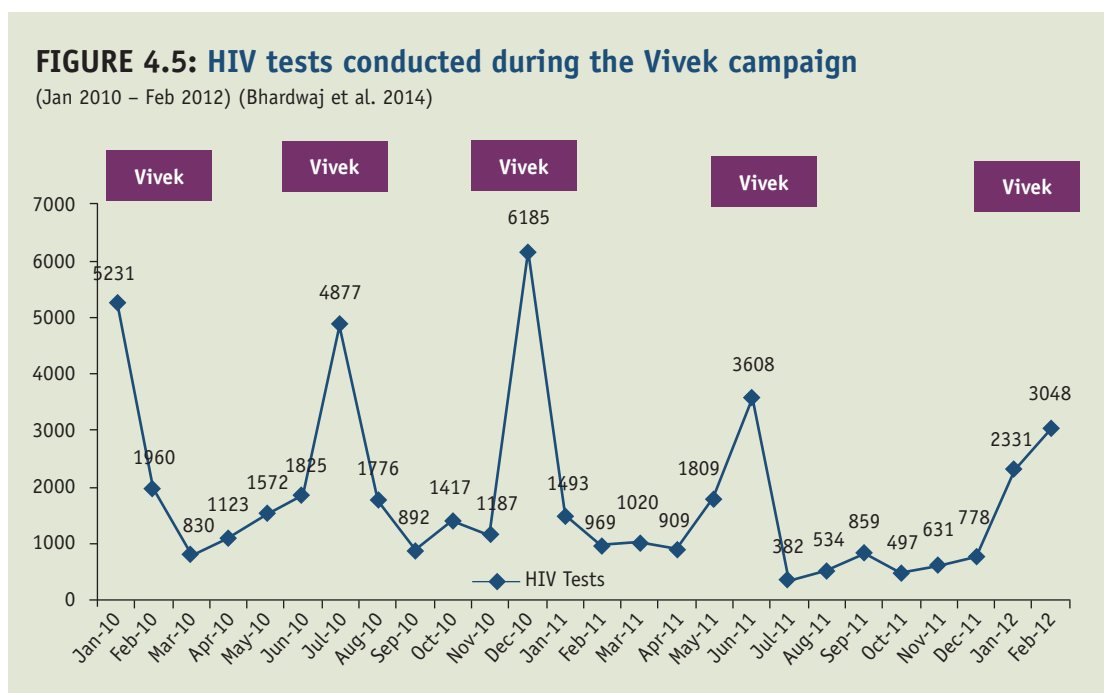
The *Vivek* campaign has been successfully replicated in SACS-supported targeted interventions in Mumbai and throughout the state of Maharashtra.

CASE STUDY 4.3: Verbal screening to improve early detection of tuberculosis

This case study describes an intervention that successfully improved early detection and treatment of tuberculosis (TB) among key populations (KPs) through verbal screening and collaboration with government TB services for diagnosis and treatment.

Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG)
Location: State of Andhra Pradesh, South India
Lead partner: India HIV/AIDS Alliance

Background

During the early years of Avahan, the state of Andhra Pradesh had the highest burden of HIV in India and reported TB/HIV co-infection rates were similar to the national average. Among the TB cases referred to integrated counseling and testing centers (ICTCs)[42] from Revised National Tuberculosis Control Program (RNTCP)[43] units between March 2009 and February 2010, five percent were found to be co-infected with HIV (CTD 2011).

Scaling up integrated TB/HIV services for KPs was a challenge for NGO partners implementing HIV prevention programs in the state of Andhra Pradesh. The Avahan program implemented by India HIV/AIDS Alliance in the state recognized that TB integration with HIV services required a greater understanding of the vulnerabilities of key populations (KPs) and recognition of stigma and other structural barriers that limited their access to health services.

Avahan and its partners (including India HIV/AIDS Alliance) entered into a memorandum of understanding with RNTCP in March 2007 with the aim of increasing intensified case-finding and access to TB treatment for KPs across six Indian states with high HIV prevalence. This collaboration between Avahan and RNTCP aimed to improve KP access to TB services through the existing HIV/STI service infrastructure.

Intervention components

To increase early detection of TB/HIV co-infections in Andhra Pradesh, Alliance India introduced a package of evidence-based interventions aimed at populations at the highest risk of TB/HIV co-infection. The intervention focused on verbal screening for TB with collaboration with government TB services for diagnosis and treatment.

Preparation phase: A state-level TB/HIV coordination committee was established with state government TB officers and representatives from Alliance India and Hindustan Latex Family Planning Promotion Trust (the other Avahan lead partner in the state of Andhra Pradesh). The

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[42]An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center
[43]RNTCP or the Revised National Tuberculosis Control Program is a TB control initiative of the Government of India. It incorporates the principles of directly observed treatment-short course (DOTS), the global TB control strategy of the World Health Organization. The program provides, free of cost, quality anti-tubercular drugs across the country through the numerous primary health centers and the growing number of private-sector DOTS providers.

committee worked closely with officials of the RNTCP program to improve communication and coordination in relation to TB/HIV activities in the state, provided a platform for taking common decisions on TB/HIV services, and played a significant role in increasing TB/HIV collaborative activities by both programs.

India HIV/AIDS Alliance conducted a situation analysis to identify service gaps and assess capacity. India HIV/AIDS Alliance initially piloted intensified TB verbal screening activities in two districts in order to study the feasibility, cost and acceptability of TB screening, and to study quality improvement by identifying good practices that could be scaled up later. Based on the results of the pilot, which showed that verbal TB screening was feasible and acceptable to KPs, verbal screening was added on to Avahan's peer outreach workers' service component, where in addition to performing their original assigned tasks, peer outreach workers also provided TB education and verbal screening and made appropriate referrals to TB services. Peer outreach workers also provided adherence support and some registered with the RNTCP as directly observed treatment – short course (DOTS)[44] providers.

All stakeholders were oriented prior to introducing the new set of interventions. They included all district TB authorities and Avahan implementing partners who were informed through a series of meetings including state-level annual review meetings. These forums helped get inputs on how to implement the new intervention while at the same time strengthening existing reporting mechanisms. This approach also strengthened the existing partnership platforms for coordination of TB/HIV services in Andhra Pradesh.

Implementation phase: Capacity building of NGO staff including outreach staff and peer outreach workers, counselors, nurses, and physicians on diagnosis and treatment of TB was conducted. Training sessions also focused on the role of service providers in treatment adherence support, including DOTS.

India HIV/AIDS Alliance developed referral protocols and verbal screening tools in collaboration with other Avahan partners, and tailored them for use by peer outreach workers. Training tools, manuals, and educational materials were designed to increase peer outreach workers knowledge of TB. The referral protocol (*see Figure 4.6*) explained the process of active case finding, referral, diagnosis, and treatment to outreach and clinic staff. Further, an integrated TB training toolkit was developed with assistance from the STI capacity building team to support a two-day training for peer outreach workers.

At the service delivery level, verbal TB screening was integrated into HIV and STI services – in the clinic by health care providers and in the community by peer outreach workers. Referral linkages with designated microscopy centers (DMCs) were strengthened to facilitate referral of TB suspects for testing and sending results back to the NGO clinic. In this model, people suspected of having TB based on the verbal screening were referred to DMCs, and those diagnosed with TB were referred by DMCs back to the NGO-run STI clinics for treatment and follow-up. Index cases of TB were encouraged to bring their close contacts for screening. Confirmed cases of TB were registered under RNTCP and were allowed to choose their preferred provider for DOTS (from among DOTS center staff, peer outreach workers and STI clinic nurses). The DOTS providers received treatment kits for their patients from the RNTCP. Peer outreach workers and clinic nurses offered additional adherence support.

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[44]Directly observed treatment - short course: a trained and supervised person dispenses and observes the patient swallowing the tablets.

FIGURE 4.6: Referral protocol for TB verbal screening

DMC: designated microscopy center
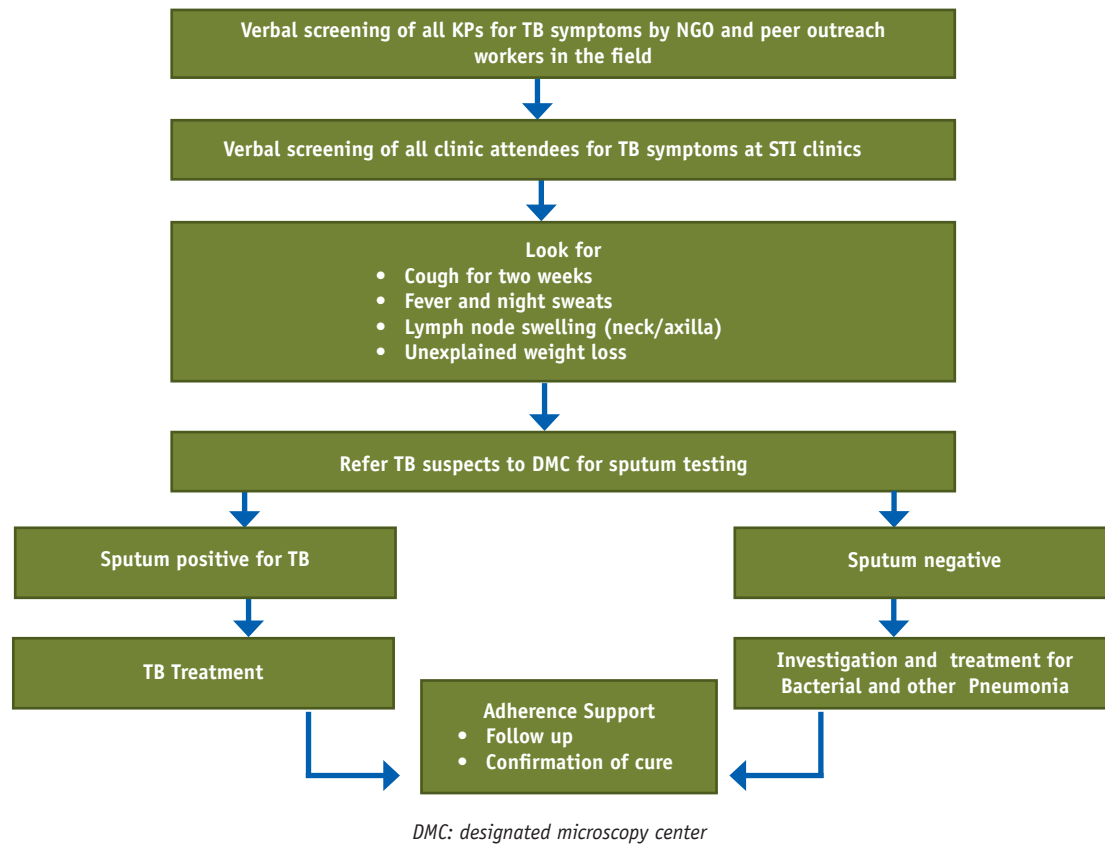
(Source: India HIV/AIDS *Alliance internal project documents*)

The project developed tools for monitoring TB activities to strengthen data collection, analysis and dissemination. Measurable indicators for measuring TB/HIV collaboration in the areas of service delivery, capacity building, partnerships and mechanisms of collaboration were incorporated into the project monitoring tools.

Implementation challenges

- Since the memorandum of understanding (MOU) had no monetary value or financial implications, there was no incentive for staff to participate in TB screening. A performance-based MOU in which financial incentives could be tied to outputs or outcomes might be more successful, but would need to be pilot-tested.

- High NGO staff turnover resulted in a need for on-going training and capacity building.

- Long distances to TB treatment centers resulted in increased travel costs and physical inconvenience to clients. This challenge was addressed by provision of TB treatment through NGO clinics that were closer to the clients' residences.

- About 20% –40% of KPs shifted residence during treatment, requiring active follow-up to ensure completion of their TB treatment.

- Other barriers seen with TB/HIV integration (but not specific to KPs) were also experienced in this intervention, such as: poor knowledge and recognition of TB as a risk; high levels of stigma associated with HIV, TB and KPs; and unreliable supplies of medicines and products.

Lessons learned

- Integrating TB and HIV services expanded the range of services available to KPs, requiring greater clinical and management efficiency. Although integration required changes to the existing HIV/STI program (e.g., designing new tools and training staff) it was possible to integrate additional related services, such as TB services, using the same basic infrastructure.

- Collaboration between various stakeholders (RNTCP, Avahan, including India HIV/AIDS Alliance and FHI 360) provided synergy. Signing an MOU was critical for defining the roles and responsibilities of each stakeholder. Partnerships also provided avenues for all relevant stakeholders to participate in joint planning, and monitoring and evaluation processes, often through structured working groups, steering committees, and other coordinating bodies.

- Program implementers need to pro-actively tackle stigma, including stigma in health care facilities, in order to increase access to TB and HIV services.

Outcomes

Overall, the intervention resulted in increased coverage of TB services. By the end of the project, verbal TB screening was scaled from two to 13 districts in Andhra Pradesh. During the three-year implementation period (2008–2010), on average, 88 percent of KPs were screened verbally for TB every year. The number of cases suspected and referred to local RNCTP diagnostic facilities ranged from 1,100 to 2,000 per annum. Of these, the proportion diagnosed with TB sputum smear examination ranged from 5.1% to 7.2%. During this period, the proportion of KPs who accessed TB treatment subsequent to a TB diagnosis increased from 83.0% to 93.7% (source: monthly TB reports).

The intervention also led to improved capacity for local organizations to deliver TB services. Health care providers at NGO clinics, including doctors, nurses, counselors, peer outreach workers, and NGO outreach staff were trained on various aspects of TB control, ranging from recognition of symptoms to medical treatment.

CASE STUDY 4.4: Meeting the contraceptive needs of female sex workers

This case study describes the integration of provider-initiated family planning needs assessment and service provision into HIV/STI clinics for female sex workers.

Target population: Female sex workers (FSWs)
Location: State of Maharashtra, India
Lead partner: FHI 360, Aastha Project

Background

Key populations (KPs) lack access to family planning (FP) services and experience disproportionately high rates of unintended pregnancy and abortion (Alliance 2012). In a study among FSWs in India who were not pregnant or infertile, or wished to get pregnant, only 53 percent were found to be using non-condom FP methods (Wayal et al. 2011). Similarly, data suggest that use of a dual method of FP (condoms plus another modern FP method) is low among FSWs and women and couples living with HIV in India (Chakrapani et al. 2011, Todd et al. 2010). In

addition, FSWs are at a high risk for unsafe abortion. Aastha FP-HIV screening data commissioned before the start of this intervention showed that women in high-risk groups (such as FSWs) report an abortion rate of 3 percent.

There are several challenges in meeting the contraceptive needs of FSWs in India, mainly policy barriers, funding gaps, stigma and discrimination (UNAIDS 2011), and service delivery challenges. In vertical programs like STI/HIV prevention, the service providers do not have the required training or capacity to appropriately address the FP needs of their clients. In addition, referrals from STI/HIV sites to FP services are often inadequate, given the stigmatization of KPs and their general avoidance of these facilities.

In this context, the FP-HIV model of Aastha integrated FP services into their HIV/STI intervention to both attract clients to STI/HIV services and reduce unintended pregnancies.

Intervention components

The Aastha project began offering FP services in its clinics in 2005. In the first phase of the intervention (2005-2010), client-initiated FP counseling services were provided in addition to HIV counseling and STI management. Other services included need-based referrals, pregnancy tests, and advice on contraceptive options. These additional services contributed to an increase in the number of monthly FSW visits to the clinics for STI screening. In December 2010, with support from USAID under the Prevention Technologies Agreement (PTA), the Aastha team strengthened the integrated model by offering provider-initiated FP screening, counseling, and referrals to all eligible FSWs in the 18-49 year age group at seven Aastha sites.

Prior to integrating provider-initiated FP services into the HIV/STI clinics, a feasibility assessment was carried out by holding consultations with community members, government and civil society stakeholders, and other public health organizations in the region. Project staff collected community inputs by holding monthly meetings with FSWs and "bar girls" and interviews with bar managers and brothel owners, to see how receptive they were to integration. Existing resources and systems, such as clinic infrastructure, staff, and the management information system were also reviewed. All feedback concluded that clients and stakeholders were receptive to integration and that public health organizations would support the project.

To ensure smooth integration and effective implementation of this initiative, several measures were taken: revision of counseling and training modules to include FP content; development of materials (e.g., Standard Operating Procedure for FP-HIV Integration, FP Screening Form, Reporting Forms, etc.); training of health care providers to offer FP services during 'normal' program activities; up-gradation of services available at the clinics to include tests for pregnancy and gynecological problems; establishment of a strong referral network of local providers of FP services; and conduction of community outreach activities to raise awareness of the new FP–HIV/STI services. Peer outreach workers educated FSWs about their vulnerability to STIs and HIV and provided awareness about FP services. Monthly monitoring visits were conducted by two independent agencies[45] that provided supportive supervision and planning assistance.

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[45]The Family Planning Association of India (FPAI) and the Society for Services for Volunteers Association (SOSVA) were the main implementing partners of FHI 360 for the Aastha Project. These agencies sub-contracted to NGOs to implement the HIV prevention program.

An FP screening form was developed to assess unmet needs and provide information on contraceptive choices. Every sex worker presenting at an Aastha clinic for HIV prevention services was offered screening for her FP needs by the health care provider using the FP screening form. The form also collected information on menstrual and obstetric history, including past history of abortions, unintended pregnancies and contraceptive use.

The following FP-related services were provided under the FP-HIV model at the Aastha clinics:

- Information on FP methods, use of condoms for dual protection, and risk reduction.

- Information about sexuality, particularly for young clients

- Assessment of the client's fertility desires and the risk of unintended pregnancy

- FP counseling, including counseling for the regular male partner

- Counseling focused on information regarding contraceptive choices, benefits and contra-indications of each and support in making informed decisions regarding FP

- Provision of oral contraceptives, condoms, and referrals to clinics to obtain other FP methods and safe abortion services

Specially designed strategic behavior communication materials were developed to support the project team with the implementation of the integrated FP-HIV model. These materials were used by the peer outreach workers and counselors to help FSWs understand the importance of FP for their physical and mental well-being. Counselors explained the various FP methods in detail in relation to STI and HIV prevention. Some of the innovative communication methods/materials used were:

a) *Jewelry box*: used by the outreach team to start a discussion around FP methods with FSWs and to promote use of FP methods with regular partners and spouses. This was a box with different compartments which contained jewelry, contraceptive methods and a story about a couple. The purpose was to convince the person that she should value her FP needs as much as she values her jewelry.

b) *Basket of choices*: used by the counselor at the time of FP counseling to help the FSW to make an informed FP choice. The basket had different contraceptive methods and the advantages and disadvantages of each were explained by the counselor.

c) *Job aid*: a wall chart job aid was used to provide detailed information regarding all FP methods and was prominently displayed in the static clinic and referred to during FP counseling sessions.

A strong referral network was established to give clients access to a greater variety of contraceptives in addition to those available on-site in the Aastha clinics. Peer outreach workers accompanied clients to clinics outside the Aastha network and reported their observations of the contraceptive options available and the clients' preferred methods.

Implementation challenges

- It was a challenge to convince the community and other key stakeholders, like brothel owners and bar owners, on the importance of FP and the need to access these services. Many FSWs used traditional methods of FP, like herbs, or sought services of unqualified providers for

abortions. Another common perception was that contraceptives and related FP programs were only meant for 'normal' families.

- Health care provider bias and related stigma was addressed by sensitizing and training providers on the rights of KPs to sexual and reproductive health (SRH) services and comprehensive FP options available for all women.

Lessons learned

- The presence of the HIV infrastructure/program in a region can be leveraged to deliver or improve access to comprehensive SRH services.

- The use of the Aastha project logo and the niche marketing of the Aastha Kendra, the drop-in centers in the project, as a center for women with no apparent connection to STIs/HIV/FP made FSWs feel comfortable while accessing services.

- It is important to track, monitor, and report on the impact of integrated services, including reporting on completed referrals, method preferences and uptake, and reductions in unintended pregnancies and abortions among KPs.

- Because research is limited on this issue, operations research to identify the most effective ways of designing services to meet the contraceptive needs of KPs (including for people who use drugs and migrants) is needed.

- Contraceptive needs of KPs should be communicated to decision-makers, including preferences for location and delivery of services, service delivery design, and contraceptive method options, to increase availability of FP services that are tailored to the needs of KPs.

Outcomes

Integration of FP services led to increased access and uptake of services including use of contraceptives, HIV testing, condom use and improvement in overall quality of services. Over the course of the project, more than 550 peer outreach workers and 70 health care providers were trained to integrate FP information with HIV messaging, provide FP counseling, and make referrals for selected FP methods. Over four years, the project provided integrated FP/HIV services to 67,500 sex workers through 16 static clinics, 36 satellite clinics, and 380 monthly health camps. Clients consistently expressed their satisfaction with the integrated services, emphasizing the importance of a "one-stop-shop."

During January to June 2011, 43 percent (4,124) of the total number of individuals (9,656) attending Aastha clinics were screened for FP needs. Of these, half (2,081) reported unmet needs for FP. The contraceptive method accepted by these individuals was primarily condoms (1,830), while a few of whom opted for dual methods. Among those who wanted dual methods, 185 FSWs were referred for oral contraceptive pills, 52 for intrauterine devices, 10 for injectable contraceptive methods, and 55 for sterilization.

CHAPTER 5

Clinic Management Systems

Chapter 5

Clinic Management Systems

Management systems support the provision of high quality clinic services for key populations (KPs). They are especially important in programs that deliver services in multiple sites and a wide range of settings. The Avahan program provided clinical services tailored to the varying needs of different KPs (female sex workers, high-risk men who have sex with men, people who use drugs, and transgenders) in rural and urban areas. Services were provided in both static and outreach settings through NGO/ community based organization (CBO)-run, private provider and government clinics in multiple states. The services were implemented and supported by NGOs and CBOs with varying capacity and need for training. Such a large, widespread and diverse program required centralized management with multiple layers of organization to provide the needed support for local implementing NGOs and CBOs to be able to provide a standardized minimum package of services.

The key management elements of a scaled STI/HIV program for KPs are shown in *Table 5.1*. Most of these Avahan program elements are described in previous chapters. The program and standards were defined in the start-up phase. As described in the introduction, the *Clinic Operational Guidelines and Standards* clearly specified the standard operating procedures for all aspects of Avahan clinical services to ensure consistent clinical care across all Avahan clinics. The organizational structure of Avahan (also described in the Introduction section) was well-suited to the task of coordination and oversight. Clinical services were supported by the program-wide STI Capacity Building team with state-level support provided by the state lead partners (SLPs). Interventions were prioritized in the Avahan *Common Minimum Program* (BMGF 2010a) and implemented in a staged manner. The clinical interventions prioritized community involvement and community-led approaches, and many clinics were managed solely by KP-run CBOs (see Chapter 1). Training of clinic staff, supportive supervision and quality monitoring are described in Chapter 3. Program evaluation was carried out through special surveys, including integrated bio-behavioral surveys. The results of these surveys are presented throughout this document as relevant.

This chapter focuses on aspects of the clinic operational systems that were not previously covered and on the monitoring and reporting system that supported clinic management.

Table 5.1. Elements of a scaled STI/HIV program for key populations (Adapted from WHO) (WHO 2013a)

Designing a scaled program for key populations	• Define program and standards • Establish a data monitoring system for management • Plan the program evaluation
Organizing a scaled program for key populations	• Define the management structure
Implementing a scaled program for key populations	• Prioritize interventions • Implement in a staged manner • Establish a supervision system • Progressively ensure full sex worker participation

Clinic operations

The *Clinic Operational Guidelines and Standards* covered all areas of clinic operations (FHI 2007), and these areas are described in other chapters. This section focuses on the structure and systems within each clinic.

Clinic structure: Although the available space for clinics was often small, especially in outreach clinic settings, the guidelines for clinic structure were designed to protect the confidentiality of patient information. The layout of the clinics included separate areas for waiting/registration, consultation/examination, counseling and laboratory (if feasible). The consultation/examination and counseling areas were enclosed to ensure both auditory and visual privacy.

Staffing: Clinics were required to have trained staff available for administrative tasks (e.g., patient registration, record-keeping, and reporting), patient management (including history-taking, clinical examination, treatment, counseling, and education), laboratory testing (where applicable), maintenance of clinical standards, procurement and maintenance of supplies and equipment. Clinic staff included a physician, nurse, counselor, clinic assistant, receptionist/manager and sometimes a laboratory technician. Adequate numbers of staff were required to allow sufficient time for full patient assessment (including speculum examination for women and proctoscopic examinations where indicated) and to avoid long waiting times for clients. Where possible, community members or their families were hired for positions such as clinic managers. Job descriptions were provided to all staff.

Clinic equipment and supplies: Clinics were provided with a list of essential supplies and equipment (see *Annex A.2*), for which inventories were maintained. Equipment was checked at regular intervals to ensure that it was in good working order and annual maintenance contracts (if feasible) were renewed. A minimum supply of consumables (drugs, condoms, needles/syringes, etc.) was defined to avoid stock-outs.

Client flow: Clinics were encouraged to develop a clinic operational flowchart depicting patient flow and staff responsibilities. The steps during a client visit to the clinic are illustrated in *Figure 5.1*.

FIGURE 5.1. Example of a clinic operational flowchart (FHI 2007)

OPERATIONAL FLOWCHART FOR SEX WORKER VISIT

PATIENT FLOW	ACTIVITIES	RESPONSIBLE STAFF
Waiting and Registration Area	• Patient details in confidential register • Clinic registration number allocated • Clinical forms prepared	Receptionist
Consultation & Examination Room	• Clinical form completed • Examination by clinician • Laboratory specimens taken • Whiff test	History/exam by clinician Specimens/whiff test by clinician
	• Specimens to laboratory technician	Nurse
Laboratory Area	• Blood taken • Wet film examined • Gram stain, RPR • Results sent to clinician	Laboratory Technician
Waiting Area		
Consultation & Examination Room	• Results & treatment given • Health education	Clinician & Nurse
Counseling Room	• Counseling and education given with 4 'C's' • Leaflets provided • Next appointment made	Counselor

Infection control: Universal precautions were implemented for all clients irrespective of HIV sero-status. The components of infection control systems were:

• Cleaning, disinfecting and sterilizing equipment: Used equipment (speculum, proctoscopes) was decontaminated with bleach solution, which was prepared by the nurse/clinic assistant before clinic hours. A majority of static clinics had small autoclave machines to sterilize equipment. A few static clinics used electric/gas boilers for high-level disinfection. Equipment used at outreach clinics was decontaminated and cleaned before being packed and brought to the static clinic for sterilization.

- Disposal of hazardous waste: Most of the clinics had an annual contract with a local, private bio-medical waste management agency for safe disposal of bio-hazardous waste. In certain remote locations (such as in the states of Manipur and Nagaland) there were no agencies for bio-medical waste management. These clinics either made an arrangement with the local government hospital (if available) for incineration of bio-hazardous waste or buried it in a deep pit.

- Post-exposure prophylaxis (PEP): Standard operating procedures for PEP were defined. Any staff member exposed to client's blood or body fluids received prophylactic treatment as per the national guidelines. In addition, an incident report was sent to the SLP.

Ethical standards and confidentiality:

- Ethical standards: Staff were trained and monitored to respect human rights and provide non-judgmental services of the highest professional standards.

- Confidentiality: Confidentiality is essential in all clinical settings, but it is of extra importance when working with KPs because of the added dimensions of stigma and discrimination they face and the criminalization and legal implications of some of their behaviors. Clinics maintained confidentiality of client information. Client records did not have any personal identifiers and used a unique ID number. The records were stored in a locked cupboard. Confidentiality policies were displayed at the clinic in the local language. All clinic staff signed a confidentiality agreement.

- Right of refusal: Clients were provided prior information on clinic procedures and treatment for their informed consent. The client had the right to refuse any or all the clinic services.

Referral system: Referral systems were developed for services that could not be provided at the STI clinics. Referral linkages were established with other local health care institutions, mainly in the public sector as shown in *Figure 5.2* below. As with all care services, referrals were voluntary with informed consent, and confidentiality was maintained. Involving the community in the development and implementation of the referral system ensured minimal barriers to accessing services.

Referral services for KPs can be more difficult to establish than project-run services because health care providers may not be knowledgeable or accepting of key population-specific needs, resulting in low quality care, stigma and discrimination for KP patients. In addition, referral services may charge user fees that are excessive for KPs. An effective referral system should have high quality linkages between services by ensuring (BMGF 2010a, FHI 2007):

- Active, ongoing discussions (and sometimes training) with the referral site and sensitization to KP-specific issues

- Active follow-up on referrals to ensure services were provided to the client and to obtain feedback

- Provision of follow-up services after the referral, either at the clinic or another appropriate site

- Facilitation by patient advocates

FIGURE 5.2. Referral linkages provided at clinics to expand access of KPs to services not available on site (FHI 360 2011)
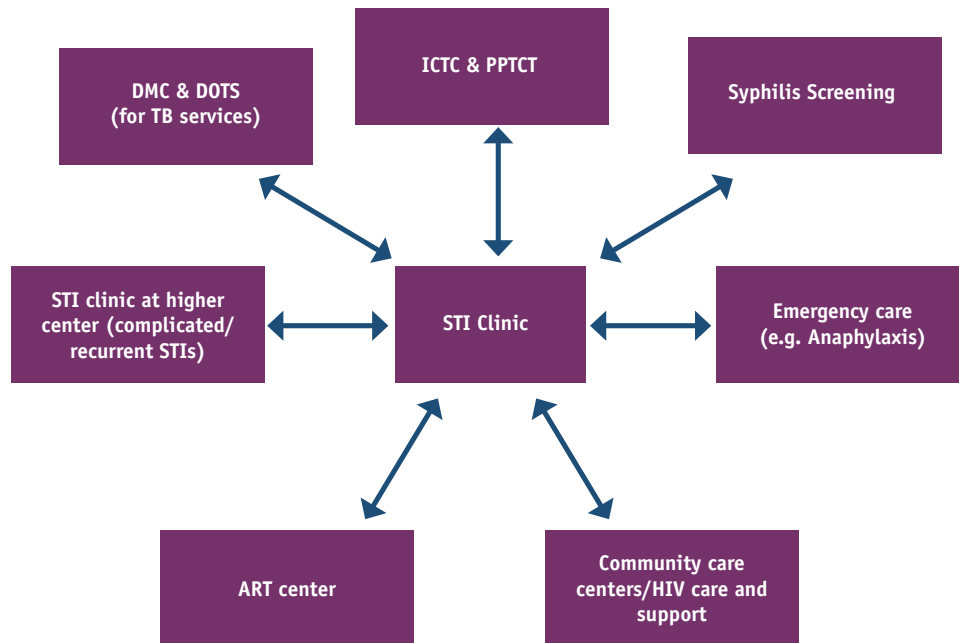
ART: antiretroviral therapy; DMC: designated microscopy centers; DOTS: direct observed treatment short-course; ICTC: integrated counseling and testing center; PPTCT: prevention of parent-to-child transmission (of HIV)

To ensure an effective and efficient referral system, NGO staff mapped suitable referral sites in the vicinity and held meetings with the concerned personnel to explain the requirements and sensitize the health care staff to the health needs of KPs. A referral register was maintained at the clinic with details of the person referred, reason for referral, and follow-up. A referral slip was provided in duplicate to the KP, one to be retained at the referral center and the other, filled in by the health care provider at the referral agency, was returned to the clinic. Most of the referrals were to government clinics with free care. In some instances when referrals were made to private institutions, either the KP paid or the cost was subsidized by the NGO/CBO.

Monitoring and reporting

A routine data collection system provides information on key program coverage and performance indicators. Data reported up to the central level are used to track overall program performance and identify program areas in need of improvement. An equally important function of monitoring systems is to provide relevant information that can be used for program improvement at the local level.

In the Avahan program, reports from clinics and individual tracking systems followed a standardized format. Monthly STI program data covered infrastructure (e.g., number of clinics), human resources (e.g., number of physicians) and service utilization (e.g., number of individuals visiting a clinic in a month, STI syndromes, syphilis screening). Unique identifier codes were used to track individuals, including dates, number, and clinical details of clinic visits over time. A list of the variables used in the electronic monitoring information system are shown in *Annex A.3*.

These data were used to provide performance feedback and inform program improvements. Individual data collected at the clinics were aggregated to enable analyses at the level of local implementing NGOs, districts, SLPs and the entire Avahan program. The use of monitoring data for supportive supervision is described in Chapter 3.

Case studies

The case studies describe the SLP experiences with implementing clinic management systems.

Case study 5.1: Clinic branding. This intervention uses consumer marketing principles for standardization, brand recognition of clinics and education activities across nine states to serve a highly mobile trucker population.

Case study 5.2: Improving the drug supply management system describes the development and implementation of an efficient drug supply and stock management system in a large STI/HIV program.

Case study 5.3: Outsourcing clinic management describes the process of outsourcing the management of clinical services to external health management agencies, including the terms of reference and the roles and responsibilities of clinic and agency staff.

CASE STUDY 5.1: Clinic branding

This case study describes an innovative business model of branded clinics for HIV prevention among truckers to improve service utilization and program coverage.

Target population: Long-distance truckers
Location: Along national highways across nine states
Lead partner: Transport Corporation of India Foundation (TCIF), Project Kavach

Background

Avahan commissioned TCIF in 2003 to design and implement an enhanced HIV prevention model for long-distance truckers that addressed some of the challenges of earlier programming efforts for truckers (e.g., lack of an integrated national approach to programming and management; projects operating as standalone interventions without coordination within or between states; didactic HIV prevention messaging by social workers working on the interventions).

In the initial phase of the Avahan program (2004-2005), interventions spanned across 34 trans-shipment locations (TSLs) in the country. However, the project reported poor coverage and utilization of services by truckers in the initial 18-month period due to high mobility of truckers, fragmented ownership patterns in the transportation industry, and a high level of message fatigue. With these challenges in mind, TCIF redesigned the Avahan program for truckers in 2006, and the number of intervention sites was reduced to 17 trans-shipment locations (see **Case study 2.5** for details).

Intervention components

The redesigned intervention strategy for Project Kavach was adapted from the well-known McDonald's business franchise model, which is based on the concept of uniform look and service across all franchise outlets. The redesigning process focused mainly on creating convenience

of access through strategic placement of services, standardization of service delivery, and a uniform brand across network clinics. The project replicated the following key consumer marketing principles that made McDonalds a global success:

a) **Convenience and accessibility**: Project Kavach used prime real estate locations to position its clinics within a particular TSL. The strategic placement of static and outreach satellite clinics provided easy client accessibility and visibility, leading to more footfalls in the clinics.

b) **Universal standardization**: Project Kavach used the well-known method of standardization of processes, systems, and customer interface that McDonalds uses across the world. Clinic staff was trained in STI protocols by TCIF and the STI capacity building team. The training stressed the need for consistent standards in clinic operations, service, and quality. The project worked closely with clinics on other operational issues, such as demand generation for clinical services and charging clients for the STI treatment packs. A central advertising campaign with clinic branding was launched to build recognition of its clinics (static and outreach 'satellite' clinics) as *'Khushi'* (happiness) clinics, with a distinctive logo (*Figure 5.3*) consisting of two flowers. To reduce associated stigma, these clinics were positioned as general health clinics rather than as exclusively STI clinics. In order to ensure that clinical services had a uniform look and feel, all clinics were painted yellow and blue and a standardized interface of services was developed across the intervention sites. Truckers were given addresses of all *Khushi* clinics across the country (printed in a booklet) to encourage them to access services while on the move.

FIGURE 5.3. 'Khushi' clinic logo

c) **Rigorous quality control:** Standardization was enforced through intense monitoring of clinic operations. The project enforced many quality control processes that included periodic supportive supervision by TCIF and the STI capacity building team.

Communication strategy: The 'surround sound' communication approach was an important strategy in the new design. This was an integrated and multilayered behavior change communication strategy, wherein the number of service touch points was increased within a TSL[46] to ensure message reinforcement and recall. The *Kavach* intervention used two modalities of communication: mid-media events and peer-led dialogue-based interpersonal communication (IPC). NGO outreach workers were replaced with peer outreach workers, who were either active truckers or ex-truckers. Peer outreach workers received intensive training on the use of participatory tools and audiovisual aids, and how to create awareness on HIV, STIs, and condom use through different IPC tools. Mid-media events included street plays, health games, film shows, truckers' festivals, and distribution of audio cassettes/compact discs. These methods aimed to communicate messages on safer sex practices to truckers and motivate them to visit the *Khushi* clinics. The events ensured messagerecall and synchronization across locations. Theme messages were standardized to ensure uniform messaging across sites, and were updated every six months to keep them new and maintain interest among the trucker population.

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[46]**See Case study 2.5** on the broker strategy in Chapter 2 for more details on trans-shipment locations.

The communication strategy was implemented in a phased manner with an emphasis on self-esteem underscored by the use of the catch line, "*Seena Taan Ke*," which means 'with pride' in Hindi. Phase I included activities to increase the self-esteem of truckers by portraying them as respectable individuals. The next phase motivated truckers to adopt safer sex behavior and its benefits. Thereafter, Khushi clinics were promoted as the solution provider, resulting in an increase in clinic attendance.

Implementation challenges

- The project experienced a high turnover rate of peer outreach workers. Whenever peer outreach workers dropped out, the project recruited new ones immediately and provided them with the necessary training.

- Condom uptake and use was low in truckers, even among those exposed to repeated communication efforts.

Lessons learned

- Implementing the program among a highly mobile population like truckers in a limited number of high-impact locations and in combination with branding and standardization of services helped in saturating the coverage and optimum utilization of available resources.

- The branding of *Khushi* clinics in terms of uniform look and color was effective in helping truckers identify these clinics in different intervention locations, given their low literacy levels and high mobility.

- An IPC approach (e.g., using photographs to illustrate the consequences of STI) could be used to motivate truckers who are reluctant to use condoms with non-regular female sexual partners.

- Although the evaluation of the business model suggested that it was successful in terms of service provision in HIV prevention programs, it required resource intensive advertising through innovative communication channels.

- A consolidated national presence through network clinics and an integrated approach to programming rather than a standalone approach are crucial for maintaining sustained engagement with mobile populations, such as truckers and migrants.

Outcomes

An independent evaluation of trucker programs in India (Pandey et al. 2011) indicated that truckers' exposure to HIV prevention interventions increased from 14% in 2007 to 30% in 2009.

There was a steady increase in the volume of truckers visiting clinics over the years (*see Table 5.2*). Behavioral tracking surveys demonstrated a three-fold increase in visitors to *Khushi clinics* in the 19 months between January 2008 and July 2009 (21% to 63%) (Rao et al. 2013).

Table 5.2. Program exposure and service utilization, 2004–2010 (Rao et al. 2013)

	Pre-redesign stage of intervention		Post-redesign stage of intervention				
Indicators	2004	2005	2006	2007	2008	2009	2010
Number of truckers contacted at least once a month per site©	374	580	910	2791	3576	4045	4327
Number of individuals (truckers & non- truckers) utilizing clinical services per month per clinic©	90	253	382	515	641	682	717
Percentage of truckers among total Khushi clinic attendees per month per clinic©	63.3	67.0	78.9	89.9	95.2	94.4	90.7
Percentage of truckers treated for STI-related symptoms	44.4	33.1	26.0	23.1	22.8	21.4	16.1

©Calculated as an average of 12 months in the year of observation

An assessment of the program suggested that communication activities such as mid-media events and IPC used in the *Kavach* project contributed significantly to increased condom use with paid and unpaid female sexual partners (Juneja et al. 2013). Compared to those who were not exposed to any intervention, exposure to mid-media alone increased consistent condom use with paid female partners by about 10 percent. Exposure to mid-media and visits to project-run clinics increased consistent condom use with non-paid female partners by 26 percent.

The existence of strong social networking among individuals contributed to increased clinic attendance over the years. The second round of the Integrated Biological and Behavioral Assessment also demonstrated a significant increase in truckers' participation in different communication activities as compared to the first round. This could be partly due to systematic peer outreach activity in conjunction with the 'surround sound' communication strategy.

CASE STUDY 5.2: Improving the drug supply management system

This case study describes the development and implementation of an efficient drug supply and stock management system in a large STI/HIV program.

Target Population: Female sex workers (FSWs), high risk men who have sex with men (HR-MSM) and transgenders (TG)
Location: State of Karnataka, South India
Lead partner: KHPT, Sankalp Project

Background

Most leading causes of death and disability in developing countries can be prevented, treated or at least alleviated with cost-effective essential drugs. Mortality and morbidity figures can be significantly reduced by making available carefully selected, low-cost drugs and using them appropriately. An uninterrupted and sustained supply of drugs and commodities is fundamental to clinical services that are part of a public health program. Hence, good drug supply management is an essential component of effective and affordable health care services.

Acute shortages of drugs and medical supplies were a common problem in Avahan program sites in Karnataka at the beginning. While there were instances of stock-outs in certain clinic locations, other sites reported over-stocking, leading to wastage of drugs due to short expiry dates. The main reasons for these shortages were inadequate capacity of managerial and facility level staff to manage drug inventories, particularly identification of minimum levels for re-ordering, and non-adherence to the first-in-first-out (FIFO) principle.

As the STI/HIV program was very extensive, an assured source of drug supply and a 'safety net' were needed to ensure that key populations (KPs) could access quality drugs through the system. Most drugs and commodities in the program were available free of charge to clients visiting project clinics and other outlets. All the KHPT-supported intervention sites were connected to a recording and reporting system designed to provide information needed to plan, procure, distribute and maintain adequate stocks of drugs. KHPT wanted to ensure that STI/HIV clinical services not only had an effective drug supply management system but also a reliable, transparent system of procurement and distribution of essential STI drugs to all relevant health facilities in the program.

Intervention components

KHPT established a Drug Supply Management System to ensure a smooth procurement and supply system of drugs. The system included a robust online drug stock reporting and indenting system to reduce indent[47] processing time at all levels, to keep track of stock positions and expiration dates of drugs, and study consumption patterns.

The drug supply management system catered to the needs of all KHPT-supported clinics which included program-linked clinics, outreach clinics, referral clinics and health camps. The system used real-time data from clinic sites (enrollment, inventory, etc.) to enable staff responsible for drug supply and management to monitor the projected versus actual demand at all locations (site, depot, warehouse). This ensured that the overall supply plan was considered when making decisions. The drug supply management system used web-based software which did not require client site installations for its use. The software integrated different services together and provided unique solutions that:

- Provided "inventory management" services at the clinic level.

- Enabled NGO staff at district and regional levels to view and comment on issues pertaining to drug supply and management.

- Allowed KHPT regional managers to verify reports and approve indents.

- Enabled senior staff associated with various aspects of the program (e.g., community mobilization) at the head office to review all reports and approve indents specific to their projects.

- Enabled procurement section to process each indent, choose vendors for supply and manage budgets.

- Allowed dispatch section updates, and supply, transporter and billing information to relevant sources like NGO offices, district/regional/head office of KHPT.

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[47] 'Indent' is a procurement term that refers to an order for goods.

A list of essential commodities and drugs was developed and quantity requirements were calculated based on the information generated from various clinic sites for the short and medium term. The products were then procured and underwent quality control checks. Supply chain data from all levels in the program reached managers to enable better decision-making.

Various standard operating procedures and additional job descriptions were developed for different cadres of staff linked to the drug supply management system, outlining their roles and responsibilities. These included:

- *Project clinic staff*. The staff prepared monthly drug consumption reports, submitted drug indents (*see Figure 5.4*), monitored the status of drug indents submitted, tracked drug expiration dates, managed near expiration drugs, and analyzed drug consumption reports.

- *Regional Manager*. The Regional Managers were in charge of 2-3 districts and were sometimes responsible for more than one project per district. They reviewed reports submitted by clinics, took appropriate action, and monitored the status of indents submitted for clinics that came under their jurisdiction. The software enabled a Regional Manager to collect information separately for each project and district under their jurisdiction.

- *Deputy Director*. The Deputy Director (STI) in the project reviewed the reports and indents submitted from all districts within their projects and approved the indents. They also reviewed the periodic summaries generated with the help of software.

- *Purchase Officer*. The Purchase Officer tracked and processed all indents approved by the Deputy Director. They raised purchase orders specific to each clinic; monitored the status of each indent; managed vendors; developed budgets; and generated periodic reports.

- *Dispatch Officer*. The Dispatch Officer received supplies from vendors, updated supply status, and managed billing and transporter information. Like the Purchase Officer, they also generated periodic reports.

Lessons learned

- Many factors play a role in ensuring effective drug supply, drug supply logistics and drug administration. These include legislation related to drug regulation, monitoring the use of drugs by all providers, use of fixed drug combination drugs of proven bioavailability, and innovative packaging such as patient kits.

- Drug supply management system can help increase the quality and reach of public health programs by ensuring better availability of the required commodities/drugs and through efficient use of available resources with minimum wastage and enhanced accountability.

Outcomes

After the introduction of drug supply management system, there were no incidents of stock-outs at Sankalp sites. Establishing drug supply management system enabled real-time monitoring of drug consumption, indent and supply, and reduced response times for orders. Real-time monitoring of drug expiration dates allowed re-distribution of supplies nearing expiration to other sites.

Following the success of the drug supply management system in the Sankalp Project, it was later expanded to the Corridors project sites.

FIGURE 5.4. Screenshot of an indent details form

CASE STUDY 5.3: Outsourcing clinic management

This case study describes the process of outsourcing management of clinical services to external health management agencies.

Target Population: female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG)
Location: State of Tamil Nadu, South India
Lead partner: Voluntary Health Services, Tamil Nadu AIDS Initiative (TAI)

Background

While all Avahan state lead partners sub-contracted NGOs for HIV prevention interventions, including clinical services, TAI used a different model. TAI subcontracted only the non-clinical interventions to the NGOs and subcontracted the clinical services component to health management agencies.

To standardize service delivery at all clinics (e.g., physical infrastructure, records/registers, treatment protocols, display materials, quality standards and monitoring mechanisms), TAI contracted two agencies based in Tamil Nadu – the M. A. Chidambaram Institute of Community Health (MAC) in Chennai and the Madurai Meenakshi Mission Hospital and Research Centre (MMHRC) in Madurai. MAC is well-known for its community centered health programs and operates 14 mini health centers, which are similar to government run sub-centers.[48] These also serve as learning sites for medical and nursing students and are involved in epidemiological, clinical and

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[48]Sub-centers are the lowest tier of primary health care services in the public health system. Each sub-center caters to a population of 5,000 to 10,000 and provides preventive and promotive health care and basic curative services.

socio-economic research studies. MMHRC is a tertiary care hospital and is involved in research and in training junior doctors. Their non-profit arm also implements many community health programs including HIV prevention and care.

Intervention components

In the terms of reference and deliverables for the management agencies, MAC and MMHRC were to collaborate with NGOs and CBOs to provide STI services. This collaboration included:

- Identifying appropriate locations, with suitable facilities for examination, counseling and audio-visual privacy, where community members could avail STI services without having to travel long distances.

- Establishing an attached drop-in center with each clinic, which could be used for interpersonal communication (IPC) sessions, including sharing of testimonies and dispelling myths and misconceptions.

- Identifying, recruiting and training medical officers, staff nurses and clinic assistants for the clinics.

- Ensuring that the doctors follow STI syndromic management guidelines as per the Clinical Operational Guidelines and Standards and the national guidelines.

- Ensuring provision of necessary equipment for examination, adequate STI drugs, and standard procedures for infection control including de-contamination and waste management.

- Providing laboratory facilities for syphilis screening, wet mount examinations, Gram's staining and microscopy.

- Compiling and analyzing the clinic monthly reports.

- Conducting periodic review meetings with the outreach team to improve uptake of clinical services by key populations (KPs) and improve its quality.

MAC and MMHRC assisted TAI in developing a wide range of display materials, including posters for clinic confidentiality policy, client rights and provider responsibilities; referral charts; treatment guidelines for anaphylaxis; and guidelines for post-exposure prophylaxis. They also developed standardized records and registers, including case cards for the first and repeat visits, and drug inventory registers. A checklist was created for Technical Managers to assess clinic performance and prioritize their mentoring visits.

TAI in close consultation with the agencies designed the staffing structure and defined the roles and responsibilities for the staff working in these two agencies and the clinic staff. The roles and responsibilities are described below:

The *Administrative Manager* was in charge of overall administration including staff recruitment, developing and ensuring adherence to administrative policies, onsite mentoring, liaison with NGO/CBO partners, and timely submission of clinic monthly reports. S/he also ensured adequate drug supplies and other logistic and infrastructure requirements for the clinics.

The *Technical Manager* was responsible for capacity building of clinic staff through central and regional trainings, onsite mentoring visits, obtaining periodic feedback on clinic performance from outreach staff and community members, analysis of monthly reports, providing necessary feedback to TAI, and ensuring optimum supplies of STI drugs in all clinics under his/her jurisdiction.

The *Accountant* managed the financial component of the program, providing feedback to the Administrative Manager and ensuring smooth flow of funds.

The *Data Base Officer* was in charge of collecting and consolidating monthly clinic reports and laboratory reports, cross-verification of clinic monthly reports, and retrieving data needed to monitor and strengthen the program. The officer was also responsible for feedback on data-related queries.

The *Laboratory Coordinator* assisted in establishing laboratories, providing onsite technical guidance for laboratory tests and feedback to individual clinics on external quality assurance (EQA) reports, and ensuring supplies required for conducting laboratory investigations.

The *Drug Distributing Officer* ensured supply of indented drugs and their periodic replacement, and physically verified drug supplies versus their utilization. The *Office Assistant* managed day-to-day office work.

Doctors provided presumptive treatment and syndromic case management to the clinic attendees, and also performed internal examinations and supervised laboratory testing. They supervised disinfection and waste disposal mechanisms in the clinics and ensured proper documentation of clinic visits and the treatment provided.

The *Nurse* assisted the doctor during examinations, ensured sterilization of equipment, dispensed drugs prescribed by the doctor, and maintained clinic records and registers. Nurses also provided counseling related to nutrition and risk-reduction, and were trained to perform simple laboratory tests/procedures. They were also trained on sample collection, storage and dispatch to the EQA agency.

The *Clinic Assistant* ensured organized patient flow, undertook cleaning and sterilization of equipment, ensured proper waste disposal, and assisted in maintaining hygiene standards.

TAI involved community members in the operation of the clinics and its overall functioning. The *Clinic Liaison Officer* was a community member, identified and selected from among peers who showed interest in clinic-related activities. They played a vital role in motivating the KPs to attend the clinic. They were trained to work as barefoot counselors and were supervised by the Nurse. Their duties included helping clinic assistants; carrying out field visits to mobilize the community to visit the clinic; following up with clients to ensure they kept their scheduled appointment for their next regular medical check-up and collected their laboratory results; and ensuring compliance with the treatment prescribed.

Implementation challenges

- While both agencies had a rich experience of running multi-specialty hospitals and primary health centers, they were relatively new to programs like Avahan. Considerable time and resources were invested to orient them to the project guidelines and the clinical and non-clinical needs of the KP communities.

- It was a challenge to ensure that the agencies complied with the management, administrative and financial guidelines of TAI when they differed from the agency's standards. For example, there were differences in the salary structures of TAI and the agencies.

- TAI had to ensure that the knowledge and skills of the front-line clinic staff, the logistics of

the supply chain, and the performance and motivational levels of both agencies were at par at any given time.

Lessons learned

- The high ratings given by WHO and the STI capacity building team to TAI clinics during on-site supervision visits were an indication that this model of outsourcing to external agencies was an effective way of delivering clinical services in a large program like Avahan, and that it was possible to deliver standardized and community-friendly services to KPs.

- Most NGOs providing targeted interventions had no experience with providing any clinical services, let alone STI services. The outsourcing strategy significantly accelerated project start-up since the clinical services were professionally managed by the health management agency.

- The different perspectives provided by the agencies contributed to problem-solving when faced with challenges.

Outcomes

The two external health management agencies were able to standardize STI service delivery across all TAI intervention sites, and improve the knowledge and skill level of STI service providers. The agencies successfully assisted TAI in developing standard operating procedures, job aids and training materials for clinic services. In addition, they helped ensure timely clinic data reporting and assisted the staff in developing analytical skills. They provided regular updates on STI service delivery to TAI with a minimal margin of error and minimal deviation from the standard protocol. The regular review of systems and procedures provided opportunities for mid-course corrections.
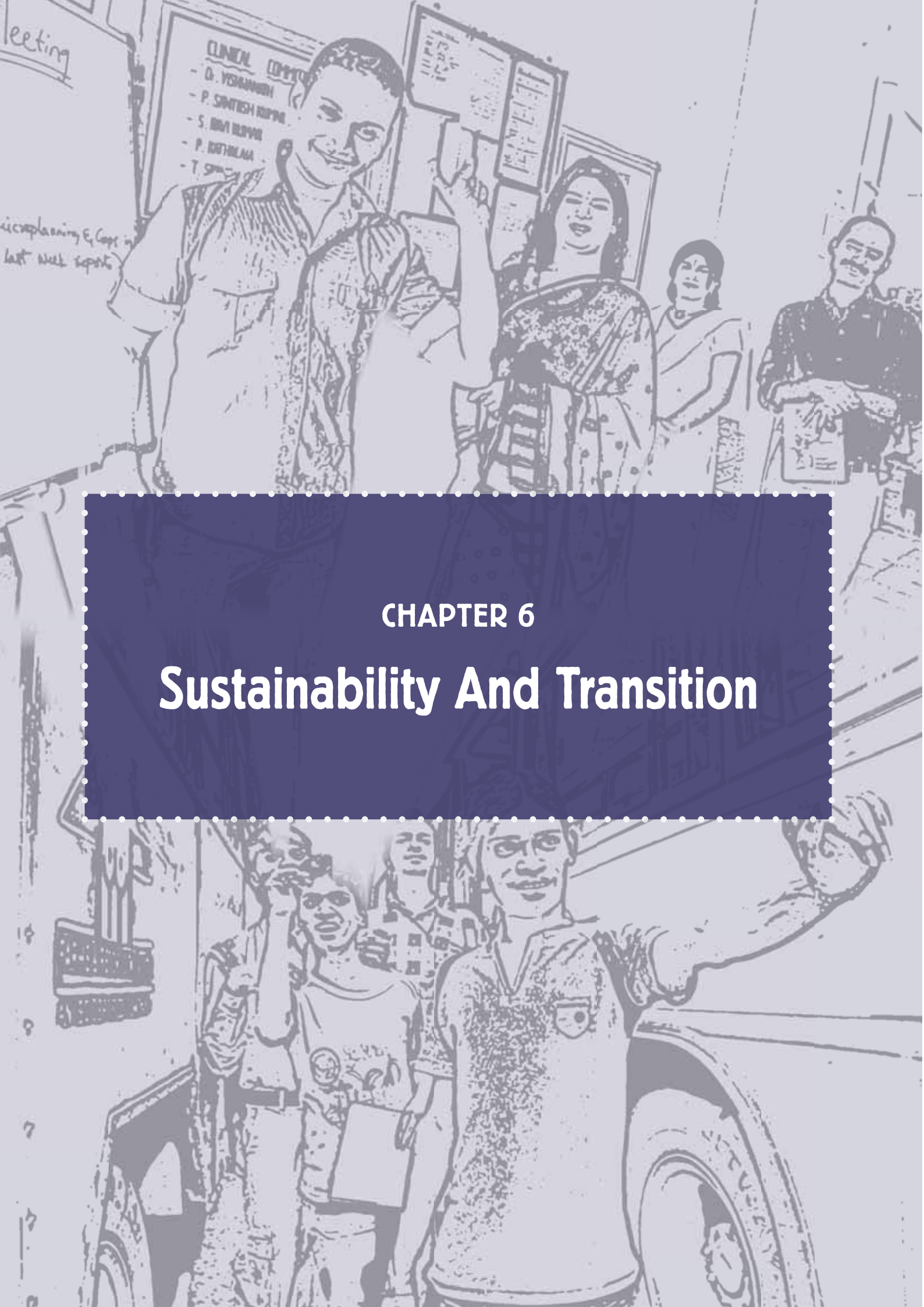
Sustainability And Transition

Chapter 6

Sustainability And Transition

As early as 2005, the Avahan program began planning for the transition of program activities to the Government of India to ensure sustained impact. In 2009, at the start of the second five-year phase (Phase II) of Avahan, an agreement was signed with the government that laid out a graduated transition approach with the aim of eventual state government management of key population (KP) targeted interventions, to be implemented through contracts with NGOs and CBOs with support from state-level technical support units. Over the following four years, a proportion (tranche) of the Avahan program was transitioned each year. Each tranche was transitioned in three phases: pre-transition planning and coordination; transition, which consisted of developing contracts between government and implementing NGOs and CBOs; and post-transition capacity building and program monitoring. After each tranche was transitioned, lessons learned were identified and applied to the transition of subsequent tranches (Sgaier et al. 2013).

Process of transitioning Avahan clinical services

During Phase II of Avahan, the STI capacity building team assisted with the transition of the management and financing of KP prevention interventions to the National AIDS Control Organization (NACO) and the State AIDS Control Societies (SACS) and disseminated evidence-based lessons learned from the first phase of the program to improve national STI services. Although technical guidelines for STI management among KPs were similar in the Avahan and National AIDS Control Program Phase-III (NACP-III), there were substantial differences in the operational design and costing guidelines for clinical services.

During the pre-transition phase, the STI capacity building team assisted state lead partners (SLPs) to align existing Avahan clinical services with government standards. *Table 6.1* highlights the differences in the costing and operational guidelines for clinical services to KPs between the Avahan and NACP-III programs at the time of transitioning, as well as activities to align Avahan

services to government guidelines in the pre-transition phase (BMGF 2010a, FHI 2007, NACO 2009). The STI capacity building team developed revised operational guidelines in collaboration with SLPs to provide guidance to NGOs to align interventions with government guidelines (FHI360 2011).

Service delivery models: The most notable difference between Avahan and the government guidelines was in the service delivery models. In the first phase of the program, Avahan-supported NGOs provided services through a single service delivery model or a combination of models to maximize accessibility at a reasonable cost. The advantages and disadvantages of the service delivery models are described in Chapter 2.

The vast majority of Avahan services were provided through project-owned clinics (static, satellite, mobile clinics and health camps). A preferred provider model was also used in some settings.

Preferred providers were trained and technically supported to provide STI services for KPs and paid a fixed consultation fee per client by the NGOs. In phase II, NACP-III costing guidelines allowed NGO-run static clinics only in settings serving more than 1,000 female sex workers (FSWs)/ men who have sex with men (MSM) or 400 people who inject drugs (PWID), while NGOs serving a smaller target population were mandated to provide clinical services through preferred providers. This necessitated a re-structuring of the Avahan Phase I service delivery models; funding for most project-owned STI services was stopped and clients were transitioned to preferred providers or government clinics.

A study conducted by FHI 360 comparing alternative Avahan STI service delivery models had shown that for larger NGOs, a combination of static clinics and health camps was the most cost-effective model. While static clinics had higher fixed costs than contracting out to preferred providers, higher volumes of services more than compensated for this cost (Delhikar et al. 2013). Hence for larger Avahan NGOs serving about 2,000-3,000 KPs, the recommendations were to retain a single static clinic at a site with a high density of KPs and provide ancillary clinical services through a network of preferred providers and health camps at hotspots located far away from the static clinic. Discussions were successfully held with NACO to increase flexibility in the implementation guidelines to allow the best service delivery models to address the local situation and community needs, as long as the budget did not exceed the NACP-III costing guidelines. One example of the outcome of this flexibility is the post-transition continuation of an outreach clinic model in areas with low density of sex workers in the KHPT Corridors project (see **Case study 2.3**).

Budget: NACP-III's annual budget per KP for STI-related services depended on the model of service delivery (INR 176 and INR 161 for static and preferred provider models respectively/KP/ year). An assessment of the actual cost of clinical services from a sample of Avahan clinics drawn from all lead partners in 2008-2009 showed that costs varied widely, ranging from INR 119 to 364 per KP per year (FHI 2009). FHI 360 recommendations for cost alignment were implemented during the pre-transition phase: reducing physician time at static clinics and splitting larger NGOs into units of 1,000 each to generate more funds available through multiple targeted intervention grants to the same NGO. In addition, the FHI 360 STI capacity building team obtained an agreement from the government for free supply of NACO STI drugs (pre-packaged treatment kits) to all NGOs working with KPs, including the transitioned NGOs of Avahan.

Performance standards: The NACP-III guidelines had different performance standards; HIV testing was recommended bi-annually (compared to no specified frequency under Avahan), and the frequency of regular medical check-ups and syphilis screening was reduced to every six and 12 months, respectively. SLPs developed communication materials to promote the new recommendations for bi-annual HIV testing. The FHI 360 STI capacity building team advocated for an increased budget for some aspects of STI care provided by Avahan NGOs that exceeded the NACP-III standards, including more frequent regular medical check-ups and syphilis screening.

Clinic staffing: Clinic staffing needed to be reduced to comply with NACP-III guidelines. Under Avahan funding, the paid clinic staff included a physician, nurse, counselor, community representatives and a laboratory technician. After the transition, funding was limited to a physician (at static clinics only) and either a nurse or a counselor. For NGOs without a static clinic, the role of the nurse or counselor was to assist at preferred provider clinics and conduct health education and counseling at drop-in centers (DICs). Training was required for the nurse/counselor to take over a range of duties, which varied by site but might include clinic documentation, history-taking, clinical examination, health education and counseling, and assisting preferred providers. Peer outreach workers were included in the outreach budget and could support clinics as representatives of the KP community on a rotational basis.

Syphilis screening: Despite the documentation of increased uptake of syphilis screening when on-site point of care (POC) tests were introduced at Avahan clinics, the NACP-III guidelines for syphilis screening using non-treponemal tests at off-site laboratories were maintained due to budget constraints.

Clinic services: The NACP-III guidelines retained most STI and HIV-related services, including STI treatment, risk reduction counseling, free condoms, needles and syringes, and facilitated referrals for syphilis screening, HIV testing and counseling (HTC) and antiretroviral therapy (ART). Other services included in the Avahan guidelines like cotrimoxazole prophylaxis, management of simple opportunistic infections (OIs) for people living with HIV (PLHIV) and tuberculosis (TB) screening and linkages to treatment, were no longer funded. The provision of services for treatment of minor ailments (see Chapter 4), which was a major draw for KPs to attend clinic services during Phase I, was also not included in the NACP-III guidelines and budget. During the pre-transition, the NGOs were encouraged to procure drugs for treatment of common ailments through other local sources.

Recording and reporting: NGO clinic staff was trained for reporting on the NACO CMIS indicators.

Technical support: Regular technical support to the NGOs had been one of the key features of the Avahan program. The frequency of technical support and oversight visits to the implementing NGOs and preferred providers was reduced post-transition.

Outcome of the transition

The utilization of clinical services by KPs after transition to government appears stable. During the first tranche of transitions, which took longer than expected, Avahan clinical interventions were not fully aligned with NACP-III guidelines. As a result, clinic attendance dropped off during the three-month transition period, but regained (or exceeded) the pre-transition level in the post-transition period. Based on lessons learned from the first tranche of transfers, pre-transition activities were initiated 18 months prior to actual handover for the subsequent tranches. During transition of the second and third tranches, clinic attendance remained stable and HIV testing

Table 6.1. Differences between Avahan and the NACP-III targeted intervention guidelines and activities for alignment[49]

	Avahan guidelines	NACP-III guidelines	Pre-transition activities for alignment
Service delivery model	Any model or combination to improve accessibility and at reasonable cost: • Static clinic • Satellite, mobile, health camps • Preferred providers • Government clinics	• Static clinic for NGOs serving >1,000 FSWs / MSM or >400 PWID • Preferred providers for NGOs serving <1,000 FSWs/MSM or <400 PWID • For all NGOs, fixed amount allocated annually for health camps (INR 5000)	• Restructured service models as per NACO guidelines • For large NGOs (about 2,000-3,000 FSWs/HR-MSM), recommended a single static clinic and several preferred providers/ health camps for better coverage • Obtained agreement from NACO for added flexibility in selection of service models for meeting community needs
Budget (recurring costs, physicians honorarium, drugs and syphilis screening)	Wide range of actual costs for combination models (INR 119 to 364/KP/year)	• Static clinic INR 176/KP/year • Preferred provider clinic INR 161/ KP/year	• Reduced physician time and cut staff to reduce costs; cross-trained staff for task shifting • Split large KP interventions to smaller units (1,000 KPs each) to obtain additional funding • Reduced drug costs by obtaining agreement from NACO to give free supply of STI pre-packaged treatment kits to NGOs
Performance standards	• Regular medical check-ups every 3 months • Syphilis screening every 6 months • Client and provider initiated HIV testing, frequency not defined	• Regular medical check-ups every 6 months • Syphilis screening every 12 months • HIV testing every 6 months	• Developed materials to motivate KPs for bi-annual HIV testing • Discussed with NACO the need to increase frequency of regular medical check-ups and syphilis screening
Clinic staffing	Physician, nurse, counselor, community representatives and a lab technician (at select sites)	• Physician and nurse or counselor at static clinics • A nurse or counselor for all NGOs	• Recommended retaining either nurse or counselor; peer outreach workers as community representatives on rotational basis • Trained nurse/counselor for 'task shifting'

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[49]INR 55 was equivalent to 1 USD in 2009 when the NACO guidelines were developed.

Syphilis screening	On-site using point-of-care (POC) or on/off site using non-treponemal tests	Off-site at referral lab (private or govt.) using non-treponemal tests	• Presented to NACO Avahan data on utility of on-site use of POC syphilis screening at KP clinics
Clinic services	STI treatment, risk-reduction counseling, free condom and syringe/needle provision, simple OI management and chemoprophylaxis, TB screening, treatment of common ailments, facilitated referrals for HTC, ART, TB diagnosis and treatment	STI treatment, risk-reduction counseling, condom and syringe/needle provision, facilitated referrals for syphilis screening, HTC and ART	• Encouraged NGOs to source drugs for common ailments from other sources
Recording and reporting	Avahan MIS	NACO CMIS	• Trained NGO staff on NACO CMIS
Technical support	Monthly by STI officers of lead partners and quarterly by centralized agency	Technical Support Unit of SACS, frequency not specified	• Discussed with NACO on need and ways to increase frequency of technical support

(BMGF 2010a, FHI 2007, FHI 2009, NACO 2009)

actually increased due to the national program's greater emphasis on testing (Sgaier et al. 2013). However, government data on the quality of clinical services in this phase are not available in the public domain.

Case studies

The case studies present approaches to transition and sustainability of four SLPs: their successes, challenges and lessons learned.

The experiences of two SLPs as they transitioned the KP interventions to government support in the second phase of Avahan are described in the first two case studies. **Case study 6.1: Transition experience: Karnataka** describes the KHPT experience of transitioning two large projects to Government of India management, with lessons learned in the areas of management, building replicable models, and post-transition support that informed subsequent transition rounds. **Case study 6.2: Transition experience: Tamil Nadu** describes TAI's change management approach to transition.

The next case studies present the sustainability initiatives of two organizations. **Case Study 6.3: Increasing access to STI services at public health facilities for key populations** describes the *Manasuraksha* campaign to promote access to STI services for FSWs and HR-MSM at public health facilities and was jointly implemented by HLFPPT and the Andhra Pradesh State AIDS Control Society (APSACS). To support the *Manasuraksha* campaign, the FHI 360 STI capacity building team

developed a training module on sensitizing government health care providers to sexual, STI, HIV and general health care needs of FSWs and HR-MSM at the request of APSACS. A short (90 minutes) trainers' module, 'Understanding High Risk Groups in STI/HIV Context' was developed in collaboration with HLFPPT, India HIV/AIDS Alliance, APSACS Technical Support Unit (TSU) and the National Rural Health Mission (NRHM)[50]. The content of the module included understanding the attitudes, behaviors and practices of KPs, recognizing stigmatizing and discriminatory practices at health facilities, and strategies to provide KP-friendly services. The FHI 360 STI capacity building team facilitated two rounds of 'training of trainers' with designated government trainers (senior health staff from AP), who in turn trained government health care providers.

Case study 6.4: Sustaining STI and HIV services for MSM/TG through a public-private partnership describes a longstanding collaboration between an MSM CBO and a teaching public sector hospital in Mumbai for provision of STI and HIV services to MSM and TG.

CASE STUDY 6.1: Transition experience: Karnataka

This case study describes the experiences of transitioning two large projects to Government of India management.

Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM), transgenders (TG)
Location: State of Karnataka and three districts of Maharashtra, South India
Lead Partner: KHPT, Sankalp and Corridors projects

Background

Reduced donor funding for public health in recent years coupled with the global financial crisis has created an urgent need for many high-performing, donor-supported HIV prevention programs to look for alternate resources. Avahan and the Government of India recognized early on the need to design a program that effectively transitioned its activities to community and the government over time.

KHPT implemented two projects under Avahan: *Sankalp* and *Corridors*. Both projects were implemented through a consortium of non-governmental and community-based organizations. The first phase (2004-2009) focused primarily on building an HIV prevention program at scale aimed at reducing HIV transmission by promoting consistent condom use, behavior change communication, and STI prevention and treatment. The project also tackled important social issues like stigma and discrimination, violence, harassment, and social entitlements.

In the second phase, the project was transitioned to government support. KHPT and its implementing partners worked towards the goal of catalyzing communities and government to take over and replicate the model of HIV prevention in its two projects from the first phase of Avahan. KHPT began handing over the program in a phased fashion to the government-run Karnataka State AIDS Prevention Society (KSAPS)[51] and communities it had served since the beginning. The fundamental idea behind transition was to empower the communities to work towards all aspects of implementing a targeted intervention, and ensure continuity of services beyond donor funding.

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[50]The National Rural Health Mission is an initiative undertaken by the Government of India to address the health needs of underserved rural areas. It provides accessible, affordable and quality health care to the rural population, especially vulnerable groups.
[51]KSAPS is the SACS equivalent for the state of Karnataka in India.

Toward that end, KHPT built the organizational capacities of community-based organizations (CBOs) to ensure long-term sustainability in both the pre- and post-transition phases.

Intervention components

The transition process in both projects (Sankalp and Corridors) was carried out in three phases over four years. Criteria for selection of districts and NGOs for carrying out the transition process were agreed upon by Avahan in partnership with the National AIDS Control Organization (NACO) and KSAPS.

Transitioning was done in an incremental fashion ensuring that programs were aligned with National AIDS Control Program-Phase III (NACP-III) guidelines in terms of finance and human resources. In the first phase, three districts (*Kolar, Raichur, and Chikkaballapur*) that had a low HIV prevalence or a controlled HIV epidemic along with strong performance in program indicators were selected for transitioning. These three districts accounted for approximately 10 percent of KPs covered during the first phase of Avahan. During the second phase, a further 20 percent of KPs in six additional districts (*Chitradurga, Davangere, Shimoga, Gadag, Haveri, Uttara Kannada*) were transferred to government management. Apart from the earlier criteria used in the selection of districts, the NGOs preferred for transition were those that had earlier received KSAPS funding for targeted interventions (TIs); that were already aligned with the NACO budget and program guidelines; were "moderately well performing"; and that were working with more than 1000 FSW/ HR-MSM/TG. The remaining districts were transitioned in the third phase.

A three-stage orientation program on the transition process was conducted for staff members from KHPT, KSAPS, and the implementing NGOs. In the first stage, Avahan organized a meeting to orient all state lead partners (SLP) staff about the transition (2008). Detailed discussions were held on the transition processes and anticipated challenges. The meeting provided clarity to SLPs on how interventions should be aligned with the existing government led programs. In the second stage, a formal meeting was held between KHPT and KSAPS to discuss the transition process at length. In the meeting, KSAPS and KHPT agreed to take up transition as a priority and defined their roles and responsibilities. In the third stage, KHPT oriented all of the implementing NGOs on the transition process through a series of meetings, and the concerns of the NGOs were discussed and clarified.

The 'transition' involved the following key steps:

- **Realignment with government programs**: Avahan TIs were realigned with government TIs according to NACO TI guidelines. This realignment took place in different program areas including: staff numbers and the staff salary structure; Peer outreach worker/KP and NGO outreach worker/KP ratios (NGOs in the transition districts aligned the ratios to one peer outreach worker for every 60 KPs and one NGO outreach worker to 250 KPs as per NACO guidelines); STI clinic staff (while some of the staff positions from the scale-up phase were retained like medical officer and nurse, counselor and health advisor posts were abolished, and there was no provision for peer counselors in the program after transition).

- **Assessments to establish transition readiness of the NGOs/CBOs**: Initially, NACO shared a baseline assessment format with all SLPs implementing the Avahan program that captured financial and programmatic data/information for each NGO or CBO. Like other SLPs, KHPT submitted assessment findings to KSAPS and the technical support unit attached to KSAPS to

help prepare the ground for field visits by NACO external evaluators. Prior to the NACO team visit, KSAPS & KHPT visited most of the TIs in preparation for the NACO assessment. This was followed by field visits by an eight member Joint Appraisal Team of independent consultants and staff from NACO and KSAPS who visited the NGO sites in the transition districts. Using the baseline assessment tool, NACO evaluators conducted an in-depth evaluation of all proposed transition districts. The team evaluated the NGOs/CBOs in all areas where alignment with NACO guidelines were planned and a checklist was developed for this purpose. After completing their visits, evaluators shared the field visit results with KHPT in the presence of Avahan, KSAPS and Technical Support Unit (TSU)[52] staff. During the meeting, KHPT provided inputs and clarifications to help evaluators better understand the implementation strategy in the districts. Problem areas were identified and lists of recommendations were drawn by the Joint Appraisal Team on how to address these issues. Later, KHPT and the other SLPs participated in a national level transition meeting.

- **Post-transition support provided by KHPT to NGOs/CBOs**: A Transition Manager, appointed specifically for the purpose of overseeing the transition process, teamed with the NGO community mobilization unit to guide the transition of NGOs/CBOs to KSAPS management. This was accompanied by empanelment of selected CBOs (based on the Joint Appraisal Team assessment scores) with KSAPS. Post-transition support was given in areas like: programming (e.g., training of peer outreach workers; creating an enabling environment); STI management; monitoring and evaluation; community mobilization; communication; advocacy, etc. Some of the specific areas where such support was given were: capacity building for outreach and CBO development; NGO costing to stabilize budgets post-transition in alignment with NACO requirements; and consensus meetings with KSAPS on various programmatic areas (e.g., district selection, peer outreach work, etc.) in order to achieve a smooth transition.

Implementation challenges

- Financial constraints: Besides reconciliation with the reduced budget (as per NACO guidelines) to run the TIs in the post-transition period, the NGO/CBO had little flexibility when it came to allocating budgets to specific line items. Release of funds was not as timely as they used to be during Avahan. In addition, non-availability of funds for CBO capacity building was one of the major concerns for NGOs who were nurturing CBOs.

- The transition process in the first phase was slow and hampered by disagreements owing to a lack of clarity around the roles of various players involved in the transition process. Post transition support, which could have helped facilitate the smooth transition of NGOs, was not sought by KSAPS and resulted in a duplication of efforts by KSAPS/TSU and KHPT. After intense advocacy efforts with stakeholders, a clear post-transition support plan for subsequent phase of transition with well-defined areas of responsibilities for concerned agencies was drawn-up and approved by KSAPS. It was agreed upon that the TSU would support all programmatic aspects and KHPT would provide support for community mobilisation activities.

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[52]Technical support unit (TSU): teams assigned to SACS to extend technical assistance in specified areas with the aim of achieving the goals and objectives of the NACP. The TSU is a coordinating body and not an implementing agency unless specifically requested. With prevention being the mainstay of the national strategy to control HIV/AIDS, TSUs focused on bringing technical and professional expertise in the areas of prevention (e.g., evidence-based strategic planning and resource planning, targeted interventions, care and support through community care centers, public-private partnerships, mainstreaming and capacity building).

- The CBO leaders and the community members were less informed and lacked an understanding of the issues involved in the transition process during the first phase. However, in subsequent phases, the Transition Manager along with KHPT zonal teams held multiple rounds of formal and informal interactions to build the capacity of the CBO leaders and board members for an effective transition.

- There were apprehensions that transition would limit the scope for innovations within the program, a practice that was encouraged and nurtured during the first phase, as interventions had to align with NACO guidelines that did not allow flexibility for such innovations. However, some unique interventions like the self-help group model implemented by a large NGO in the first phase was accepted by KSAPS and continued post-transition. Similarly, budget negotiations for issues like merger of positions and higher salary for experienced staff were accepted by KSAPS.

Lessons learned

The following were some of the lessons from the experiences of the first two phases of the transition process which could inform future large-scale programs.

- *Project and people management*: For easy costing/financial re-alignment during transition, processes should be adopted at the beginning of the financial year itself. Internal mock evaluations should be conducted across all districts marked for transition, and program gaps identified well in advance so that theme-specific trainings and other capacity building initiatives can be planned accordingly.

- *Building replicable models*: It is important to advocate with the lead national level coordinating agency (NACO in this case) regarding the need to continue with successful models under the donor-funded scale-up phase of the program, despite 'not fulfilling' the criteria used for selection of such NGOs/CBOs or projects. This will go a long way in ensuring value for money invested in the long run. CBOs should be well-established before the end of the first phase. For this purpose, NACO guidelines required for funding CBOs need to be strengthened. The CBOs were supported to comply with all the requirements like budgetary, administration, staffing and management guidelines. The understanding was that CBOs were still new and inexperienced, and that during post-transition there would still be a need for institutional building and assistance to fulfill the statutory requirements enacted by KSAPS/NACO. Additionally CBOs, who are the natural owners of the program for the community, should be encouraged to mobilize resources from multiple sources to reduce single-source dependency.

- *Post-transition support*: Robust review mechanisms (e.g., setting up different forums or committees) should be instituted that can periodically review the progress of transition.

Outcomes

A transition roadmap was developed to incorporate elements of post-transition support, through workshops and consultations with SLPs, SACS (Maharashtra, Andhra Pradesh, Tamil Nadu and Karnataka) and Avahan representatives. This facilitated a smoother transition especially during the second and third phases of transition. This road map recommended appointing new staff or assigning old staff to the role of supervision and oversight. Reporting directly to the Team Lead of the TSU, the staff member would support the 15 targeted interventions in the six transition

districts through supportive supervision and hand-holding during the second phase of transition. This support ensured the presence of experienced program staff even after transition, until the TSU hired personnel of the right capability to support the new TIs.

KHPT supported KSAPS in strengthening the community mobilization component to ensure long-term sustainability of the program by building strong CBOs that could take a leadership role in addressing issues affecting the community. KHPT worked towards strengthening institutional capacities of communities for improved governance and management and improving their ability to systematically address crisis. KHPT also worked towards encouraging capacity building within the community to advocate for their rights and entitlements. The key objective was to establish a system within each community where local leadership could set its own agenda and vision to establish a system of governance that is inclusive, participatory and democratic with robust accountability to the community.

Given the scale of the program in the state of Karnataka, the need to coordinate and provide opportunities for cross-learning was identified to enhance the overall quality and effectiveness of work. A systematic approach for the same was followed through: experience sharing forums (both at regional and state levels); capture of best practices across implementing partners (both written and video documentation); and systematic dissemination of lessons learned and best practices through documents and articles uploaded on KSAPS and TSU websites.

The Karnataka transition journey represented a model case for replication of the processes across the country and other countries with similar settings as India. KHPT developed training modules to help its partners understand transition and get clarity on the steps required. This was required given the unique feature of the Karnataka model which had a high number of CBO partners implementing TIs, thus necessitating skills and capacities in the area of CBO strengthening and CBO management. KHPT also developed specific modules for program managers for CBO-TI management along with modules to enhance critical thinking and collective action, encourage responsive governance, and enhance advocacy skills for CBOs.

CASE STUDY 6.2: Transition experience: Tamil Nadu

This case study describes the experience and change management process for transitioning the TAI services to Government of India management.

Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG)
Location: State of Tamil Nadu, South India
Lead partner: Tamil Nadu AIDS Initiative (TAI), a project of Voluntary Health Services (VHS)

Background

As per the agreement with the National AIDS Control Organization (NACO), the targeted interventions (TIs) supported by Avahan and implemented by TAI and its implementing partners were transitioned to management and funding by the Tamil Nadu State AIDS Control Society (TANSACS). The process of transition took place in phases between July 2009 and June 2012.

Intervention components

During the transition period, TAI and TANSACS involved the community and implementing NGOs/community-based organizations (CBOs), taking their perspectives into account to ensure

a smooth and effective transitioning of TIs in the state. Efforts were made to ensure that key elements of community participation and ownership were retained in the post-transition period.

To guide the transition process, a framework of overarching principles for change management was developed with three primary dimensions:

1. *Cognitive dimension*: NGOs continued to empower community members to develop and maintain a perspective of program ownership rather than simply identifying as beneficiaries. This also facilitated the formation of KP-owned CBOs.

2. *Management dimension*: TAI targeted interventions adopted NACO guidelines for project management of fund flow, technical support, capacity building, reporting and reviewing performance. Both TAI and TANSACS trained staff from the NGOs/CBOs on aligning program implementation and reporting forms with NACO guidelines.

3. *Strategic dimension*: During the transition, TAI continued to 'mobilize and empower' key populations (KPs) through community-led approaches, including addressing the social and welfare needs of KPs.

The three dimensions of transition complemented each other to support and strengthen the transition process.

Pre-transition activities: The transition process was planned internally by TAI and TANSACS and these agencies discussed the technical, administrative and financial implications of transitioning. A number of key pre-transition initiatives were taken by TAI in consultation with TANSACS to prepare the planners, implementers and beneficiaries of the project for the transition process.

Stakeholder involvement: A joint team of TAI and TANSACS personnel met with the implementing partners to brief them about the process of transition and post-transition activities. This helped many stakeholders identify major areas of concern and discuss with TAI and TANSACS. Areas of differences in the operational aspects of implementing NGOs/CBOs were identified and discussed so that TANSACS was aware of them and addressed them wherever possible. Protocols were developed for addressing issues like staff salary and budget allocation for community support initiatives. In addition, the TAI team held community-level meetings involving interactive sessions with KP members to inform and prepare the communities for the transition process.

Restructuring: Restructuring of clinical service delivery models was carried out to align with NACO guidelines. TAI's project was based on a model of NGO-run static and satellite clinics. At sites where there were less than 800-1,000 KPs, NACO guidelines stipulated the use of preferred providers. Therefore, there was a need to establish preferred provider and government clinics to replace the static or satellite clinics in areas with a low density of KPs. The new health care providers inducted in the program were trained and mentored during on-site visits by the health management agency (see **Case study 5.3**).

Pre-transition support: Prior to transition, support was provided to the partners in different areas. TAI engaged consultants to objectively assess the project technically. The documents and data maintained by the projects were verified for reliability and accuracy and the performance was appraised against set objectives. The consultants also provided mentoring support and technical

assistance to the TAI NGOs/CBOs to help them align with TANSACS guidelines. As the 'terms of contract' in TAI were different from the contracting norms of TANSACS, the implementing NGOs and CBOs were oriented about the contracting protocol of TANSACS before finalizing the contracts.

Post-transition support: It was mutually agreed between TANSACS and TAI that in the immediate post-transition period, TAI would provide support to the transitioned NGOs/CBOs in major activities, including provision of training for TI staff in areas mutually decided by TAI and TANSACS. TAI would also provide support for developing communication materials, performing needs assessments, and identifying effective community preferred materials. TANSACS and TAI agreed to conduct joint periodic reviews to identify program gaps and address them. During these reviews, technical assistance was provided in key focus areas like service uptake, HIV testing and counseling (HTC), regular medical check-ups, antiretroviral therapy (ART) registration, and follow-up. A Memorandum of Understanding for the post-transition support was signed by TAI and TANSACS.

Transition process: Various administrative and operational steps were followed in the transition process. A technical nodal officer was assigned by TANSACS to help in organizing and updating various documents for the TIs. The existing project staff was trained on different operational aspects as per the NACO guidelines. Project managers were trained on program management and CMIS, counselors on STI and risk-reduction counseling, and M&E officers on reporting systems and CMIS. NGO outreach workers received training on STI management, communication skills, and refresher training. The training was also complemented by a transition orientation program that introduced the NGO/CBO staff to systems and services of various departments of TANSACS.

During the initial period of transition, NGOs/CBOs were provided ongoing technical assistance and mentoring by both TAI and TANSACS to ensure a smooth transition. This included joint supportive monitoring visits by TAI and TANSACS to the transitioned NGOs/CBOs; assessment of transition preparedness including documentation of the transition process; and provision of technical assistance from TAI for a few months into the first phase of post–transition to ensure continuity and sustain the performance.

Post-transition phase: TAI designed and implemented a supportive management and monitoring system to ensure effective change in management and to address challenges as they arose. Some of the key elements of this system included information sharing through effective communication; monitoring systems; and support for aligning financial and human resource systems. Sharing of information about transition with the staff and KPs helped them to understand that transition is an important step in project implementation and to understand their own role during the process.

Implementation challenges

Transition was a challenging process especially during the first phase. Some of the key challenges seen were:

- *Losing community focus of the project*: After having experienced a high level of ownership and community centeredness during the first phase of Avahan, many transitioned projects had difficulty in maintaining the community focus into the transition phase. One of the major concerns in the initial stages among the community members was that the project would lose its community centeredness and become a target-oriented program. During implementation of

Avahan, community gatherings were a norm and considered important by KPs. However, it was felt that there was generally a lack of interest in these events post-transition. This was because the NACO assessment criteria and targets were not focused on community participation.

- *Utilizing the skills of peer outreach workers and KPs*: Skill building of the KPs and utilization of their skills in the project was a key component during Avahan, but both project staff and community members felt that there was under-utilization of these skills after transition.

- *Reduction in number of peer outreach workers*: In the post-transition phase, there was a significant reduction in the number of peer outreach workers. This was due to the difference in the peer outreach workers: KP ratio followed in the post-transition period when it had to be brought down from 1:30 (during Avahan) to 1:60 (in line with the TANSACS protocol).

- *Nutrition support for people living with HIV (PLHIV)*: Many KPs felt that nutritional support for PLHIV did not receive the same attention that it did during the TAI project. The KPs also wanted the program to establish linkages with agencies and organizations delivering different care and support services to the PLHIV.

- *Salary adjustments*: Transition affected the salaries of many TI project staff who had been working since the start of Avahan. Many did not receive the increments they were entitled to by virtue of being long-term employees.

- *Finance and audit systems*: TAI followed quarterly audits along with regular monitoring for adherence with finance systems under Avahan. Under the new system of TANSACS, this was replaced by half yearly audits, sometimes resulting in delays in funds flow.

Lesson learned

- The later transition phases saw fewer concerns raised by staff and KPs than the first phase. By ensuring a phased approach to transition, TAI was able to address the concerns in a far more effective way as it provided enough time to work on the solutions. Each of the subsequent phases did better as compared to the previous one. This was evident in Salem, Theni and Thanjavur districts of the state, which were among those transitioned in the final phase and which reported the least number of problems.

- Project staff and community members need support from various quarters to ensure that transitioned NGOs/CBOs perform well in the post-transition period. Regular staff meetings are important to review program indicators and to provide technical assistance and feedback for improvement. A 'Crisis Management and Grievance Redressal' system with the involvement of community members, TI staff and legal experts can go a long way in retaining the support of the community for such projects. For this, community members who are experienced and skilled in crisis management could be part of a support system that addresses crises when they arise. All projects should continue to adhere to confidentiality codes to ensure high participation of KPs in the project, and ensure non-judgmental and non-stigmatizing attitudes of project staff. Drop-in centers (DICs) are by far the most preferred social space for community members to spend quality time and should continue. The activities of the DICs and the sharing of experiences among members helped not only build their confidence and fostered solidarity but also helped in creating demand for various services.

Outcomes

TANSACS requested that the health management agency continue providing capacity building and technical support for the transitioned clinics. The agency conducted training for health care providers working at these clinics and, in collaboration with TANSACS, provided mentoring support and feedback during on-site visits.

There was adequate community participation and preparedness for transition. Many CBOs matured by the time the project was in the early part of the second phase of transition, indicating that KPs perceived transition as an opportunity to build fellowship among their peers and partnerships with TANSACS. Community members were successful in responding to crises at their level and hence confident of sustaining such initiatives. This had long-term implications wherein the community was empowered to address issues of rights violations and vulnerability. Community members, who initially accessed the project for social benefits, later became active in the project as peer outreach workers, NGO outreach workers and community animators. In addition, the community members, who at the time of transition were CBO office bearers, started taking responsibility of implementing the project through their own organizational structures.

The community members and NGO/CBO staff identified a number of transition benefits when the process was complete, in sharp contrast to the concerns and fear expressed by them during the initial phases. Many members of community groups and project staff felt they were part of the larger program at the national level, and hence developed a sense of ownership. Community members gained confidence in accessing benefits from government services and welfare outlets at the district level. NGO and peer outreach workers felt that the training and mentoring support provided by TANSACS helped them to better understand technical aspects of TIs, including areas like identification of new KPs, site validation, validating the list of peers for outreach, risk assessment and outreach planning.

CASE STUDY 6.3: Increasing access to STI services at public health facilities for key populations

This case study describes a state-level health systems strengthening initiative and community outreach campaign to increase access by key populations jointly planned and implemented by public sector health officials, NGOs and the community.

Target population: Female sex workers (FSWs), high-risk men who have sex with men (HR-MSM) and transgenders (TG)
Location: State of Andhra Pradesh, South India
Lead partner: HLFPPT, Swagati project

Background

Personal, structural and socio-cultural constraints contribute to the low rate of utilization of services from the public health care system by key populations (KPs). In order to promote utilization of public health facilities among KPs, the National AIDS Control Organization (NACO) directed all implementing NGOs in December 2010 to ensure that at least 25 percent of all STI services for KPs should be availed through a government facility. This meant that of the recommended four regular medical check-ups annually, at least one should be conducted at a government hospital. It was envisaged that at the same visit, the KP should also avail of syphilis

and HIV screening at the government facility. In line with this directive, the Andhra Pradesh State AIDS Control Society (APSACS) partnered with HLFPPT to launch a state level campaign called *'Manasuraksha'* to mainstream vulnerable populations to enable them to effectively access STI services in government facilities.

Intervention components

The *Manasuraksha* campaign's mainstreaming and health system strengthening initiative addressed the problems by addressing both the demand and supply components. It enabled the KPs to engage in problem-solving at their level in order to nurture a habit of seeking services from the government hospitals; and worked towards strengthening the delivery system in the government hospitals by ensuring availability and accessibility of health services through advocacy with health officials.

The initiative was loosely based on the theory of co-production of public services which states that public services can be delivered in an equal and reciprocal relationship between professionals and people who use these services. In this, KPs not only worked together, but were also consulted and included from the beginning of the campaign to find a shared solution.

With the goal to mainstream KPs into public health care institutions, the HLFPPT-led Swagati project drew up a detailed plan to support APSACS in strengthening the health systems in seven districts of coastal AP. While the activity was conceived by HLFPPT, the responsibility of implementing it was shared between the Swagati project (for districts Srikakulam, Krishna and Guntur) and the technical support unit (for districts East Godavari, West Godavari, Prakasam and Nellore). This activity was endorsed by APSACS and incorporated into their Annual Action Plan. The initiative lasted from January 2011 to March 2012 and was named after the *Manasuraksha*[53] clinics.

Needs assessment: NGO outreach workers of the Swagati project initially mapped Linked Government Hospitals[54] in close geographic proximity to the KP solicitation points or 'hotspots.' A distance of 10 km from a hotspot was considered as being proximal. Only the centers where NGO outreach workers felt that at least 25 percent of the total KPs registered in that hotspot could physically visit were included. The outreach workers mapped the KPs under each linked hospital (Primary health care center, Community Health Center, and Designated STI/RTI clinics) in the *mandal*/s (sub-districts) allotted to them, and also disaggregated the number of KPs according to the distance from the centers (see example given in *Table 6.2*).

Apart from identifying linked hospitals, the staff also carried out an assessment of these centers, using a pre-defined tool that assessed resource gaps (both human and material), and presented their findings to the district health authorities. The findings were also used in advocacy with the health officials to address the gaps (e.g., filling up vacancies, provision of essential commodities, infrastructure requirements, etc).

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[53]*'Mana'* means 'our own' in the local language Telugu in AP. *'Suraksha'* (means protection in Hindi) clinic was the name given to all the designated STI/RTI clinics (DSRCs) in the medical college hospitals, government general hospitals, district hospitals and area hospitals in the country.
[54]'Linked government hospitals' are all government hospitals (DSRCs/ CHCs/ PHCs), located within 10 km distance of the hotspots, which were considered as linked facilities for mainstreaming purposes.

Table 6.2. Facility mapping for West Godavari district

Facility-wise KP coverage-Guide MTM						
Govt't Facility	Mandal	Name of the ORW	0 to 5 Kms	5 to 10 Kms	More than 10 Kms	Total
DSRC	Machilipatnam	M. Nagarathnam	45	174	26	245
		T.Hemabhadra Rao	194	41		235
		P.Srinivas	51	98	95	244
		M.Yesumariamma	207			207
CHC	Avanigadda	Koteshwaramma	220	19	0	239
PHC	Koduru	B.Sunil Kumar	47	0	0	47
PHC	Nagayalanka	B.Sunil Kumar	125	0	0	125
		Total	889	332	121	1342

DSRC: designated STI/RTI clinic; CHC: community health center; PHC: primary health center

A confidential survey was conducted among KPs by HLFPPT in order to understand what KPs wanted from their treating doctors/providers. The survey questionnaire covered various facets of clinical practice at public health facilities that were considered important by KPs.

Orientation and training of government officials and heath care providers: Swagati in coordination with APSACS conducted half-day 'mainstreaming' workshops for state and district health officials, where they were oriented to the objectives of this campaign and presented with the findings from the facility assessment. Four such workshops were held during the campaign period. In addition, Swagati trained all health care providers in the linked government hospitals, including doctors, nurses and laboratory technicians in a phased manner.

Health care providers working in the linked government hospitals were sensitized to the needs of KPs in the first two months of the initiative. An innovative 'Know Your Doctor' campaign was organized at the drop-in centers run by the implementing NGOs, where KPs were invited to interact with doctors and other staff of the linked hospitals. The district-based community-based organizations (CBOs) organized and facilitated these sessions.

Some of the centers that KPs were mobilized to visit were government hospitals that came under the operational purview of the NRHM.[55] Since these centers, namely the PHCs and CHCs, were key government centers delivering STI/HIV care for KPs around hotspots, the project also actively collaborated with the NRHM officials to address the resource gaps in these centers. Periodic meetings and discussions were also held with district medical officers for active coordination and support. These officials were also invited to the mainstreaming workshops.

Outreach campaign: Implementing NGOs drew up detailed mobilization plans for peer outreach workers to reach out to KPs who did not avail services at the *Suraksha* clinics for different reasons.

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[55]The National Rural Health Mission (NRHM) is an initiative undertaken by the Government of India to address the health needs of underserved rural areas. It aims to establish a fully functional, community owned, decentralized health delivery system with inter-sectoral convergence at different all levels, on a wide range of health care areas such as water, sanitation, education, nutrition, social and gender equality. CHCs and PHCs come under their purview.

The outreach team (peers and NGO workers) visited all the KPs in their jurisdiction and checked if they had availed HIV/STI services in government centers. KPs who had not visited these clinics in the last three months or had not been tested for syphilis and HIV for the previous six months were encouraged, on a priority basis, to visit the nearest government hospital where these services were available.

Implementation challenges

- Bringing KPs and health officials together on a common platform was a challenge in the initial stages of the campaign. Convincing the KPs and the CBOs that they were allowed to 'discuss,' 'debate' and 'question' health care officials was difficult. It was a challenge convincing KPs, the health care department officials and the providers about the ethos of co-production.

- Some of the gaps in government settings persisted despite advocacy and other efforts to address them. The reasons were systemic which required remedial measures from higher government departments and senior officials.

Lessons learned

- Since the initiative was aligned with APSACS goals and work plan, APSACS took the lead in advocating with and pushing the government machinery for its successful implementation. This may not have been possible for an NGO like HLFPPT alone.

- The initiative demonstrated how mainstreaming KPs is possible by recognizing communities as assets, applying local insights, working collaboratively, and innovating continuously.

- The 'soft advocacy' approach of the project implementing partners (HLFPPT, APSACS) worked more effectively with government officials and providers than a confrontational approach. It was very important for the partners and community members to avoid negative caricaturing of government facilities and providers. The community members also realized very early in the campaign that it was resource gaps (e.g., unfilled vacancies, lack of drugs, etc.) more than the problem of 'insensitive providers' that have earned government centers a 'bad name.' This went a long away in building their trust in government services.

- Co-production of public services in the campaign marked KP visits to government hospitals and receiving treatment for STI as 'services' produced by the government health facilities. The providers and other staff at the facility played the role of producer of this service and KPs contributed to the production of this service. This arrangement added value to the health services provided in government health centers.

Outcomes

The campaign, which started in the form of a pilot project in seven districts, was subsequently scaled to 23 districts of Andhra Pradesh. The campaign helped boost the self-esteem of community members and they were able to freely express their views and concerns about the services at government hospitals. It provided an opportunity for the community to directly engage in dialogue with government health officials to advocate for better services and address resource gaps. Communities developed confidence to negotiate with government for better services without help from NGO staff.

At the end of the campaign, processes were institutionalized in government settings to sustain the gains made. For example, many districts put a system in place for regular review meetings between local health officials and KP representatives every month at the sub-district (*mandal*) level and every other month at the district level.

A study was conducted in March 2012 to evaluate the effects of the initiative. *Figure 6.1* shows the respondents responses before and after the campaign from one of the intervention districts in the state. Overall, fewer KPs reported discrimination and long waiting times, and more KPs reported having internal examinations and feeling that the health care providers adequately addressed their needs.

FIGURE 6.1. KP perceptions: before and after the *Manasuraksha* **initiative (Guntur district) (%)**
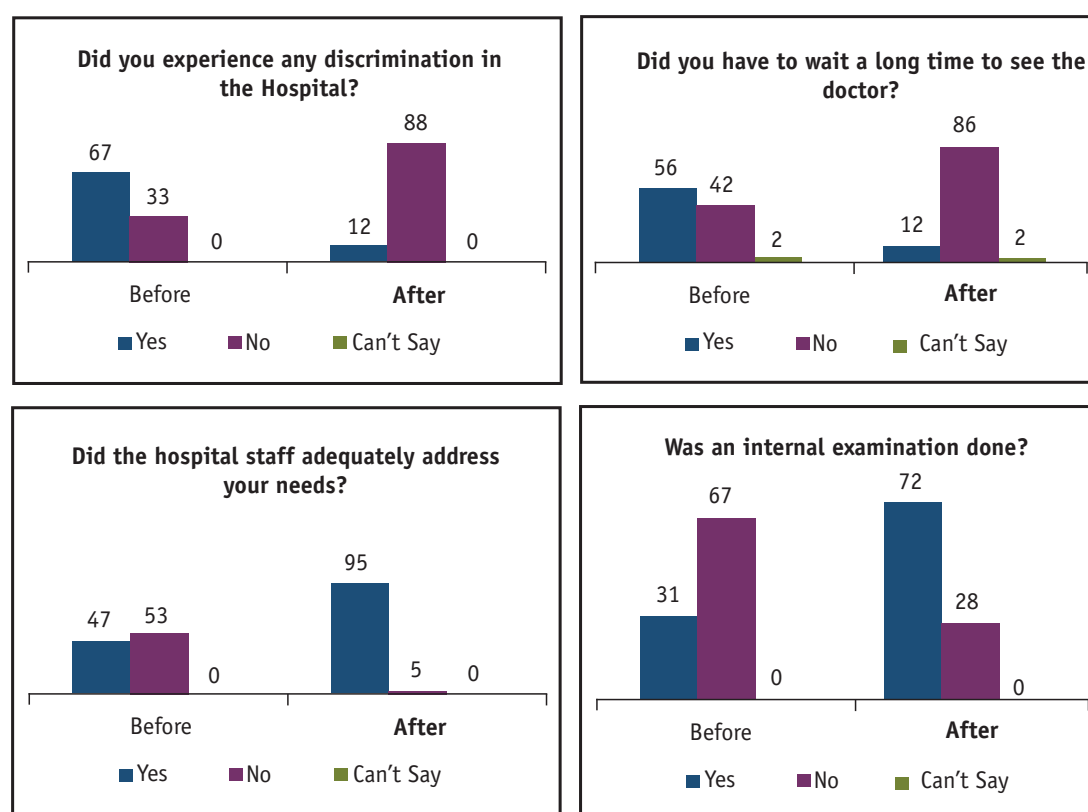
Source: HLFPPT internal project documents

There was an increase in utilization of government clinical services during the campaign. For example, data from the Nuziveedu *mandal* of Krishna district showed an increase in the number of HIV tests done at the nearest integrated testing and counseling center (ICTC)[56] facility and the number of FSWs who sought STI treatment from the nearby government hospital (see *Table 6.3*).

Overall the KP attendance in the government designated STI/RTI clinics for all seven districts involved in the campaign showed a significant increase as shown in *Figure 6.2* below.

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[56]An integrated counseling and testing center is the Indian terminology for an HIV testing and counseling (HTC) center

Table 6.3. Increased utilization of HIV/STI services in Nuziveedu *mandal* (April 2011– January 2012)

Nuziveedu	HIV test done at ICTC	FSWs seeking STI treatment in govt. hospital
April - June 2011	31	0
Sept 2011 – Jan 2012	97	138

Source: RIDES Nuziveedu TI monitoring reports

FIGURE 6.2: Proportion of KPs attending govt. designated STI/RTI clinics (DSRC) during the campaign period: attendance by KPs versus total KP population
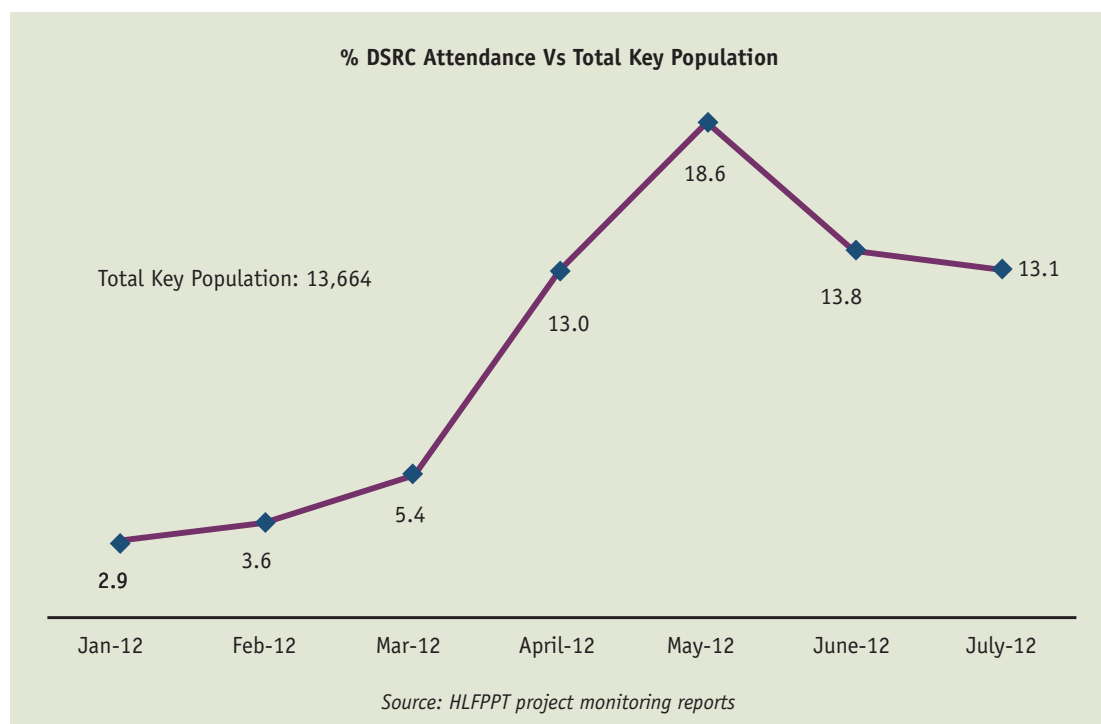
% DSRC Attendance Vs Total Key Population

Total Key Population: 13,664

2.9 3.6 5.4 13.0 18.6 13.8 13.1

Jan-12   Feb-12   Mar-12   April-12   May-12   June-12   July-12

Source: HLFPPT project monitoring reports

CASE STUDY 6.4: Sustaining STI and HIV services for MSM/TG through a public-private partnership

This case study describes a longstanding public-private partnership between an NGO and a teaching hospital to provide clinical services for the MSM and transgender communities.

Target population: Men who have sex with men (MSM) and transgenders (TG)
Location: Mumbai, Maharashtra State
Lead partner: Humsafar Trust (HST), a community-based organization (CBO) based in Mumbai, which received partial funding from Avahan through the Aastha Project (FHI 360)

Background

Humsafar Trust (HST) promotes lesbian, gay, bisexual and transgender (LGBT) rights and has been working on male sexual health since 1994, engaging with MSM and TG communities, including gay and non-gay identified men, eunuchs, transvestites and sex workers. In addition to imparting skills and fostering confidence among these communities to live healthier lives, they

also improve access to health services. From its inception, HST was funded by the government and other international donors. In 2004, HST received funding from Avahan for providing HIV prevention services to male sex workers in Mumbai.

HST's role in providing HIV and STI prevention and treatment services for MSM and TG in Mumbai has evolved over time. HST has worked closely with a number of government health facilities, most extensively with Sion Hospital, a tertiary teaching hospital, to provide sustained training and sensitization programs for health care workers and clinical staff on the needs of MSM and TG clients including those living with HIV. In addition, HST has engaged with the MSM and TG communities to mobilize them to both participate in HIV prevention and other sexual health programs as community mobilization projects, as well as benefit from the services provided by these programs.

MSM and transgender people experience significant barriers to equitable, consistent, and high-quality health care due to discrimination and ignorance regarding non-traditional gender identity within the medical community (MSMGF 2010). From instances of inappropriate behavior to outright refusals, many health care institutions make it difficult for these KP groups to receive appropriate, respectful, and compassionate treatment. This insensitivity often results in disengagement from the health care system resulting in poor health outcomes.

Health professionals in India have long neglected the MSM and TG communities. Medical conditions relevant to MSM and TGs have received limited attention, both in the medical literature and during medical training. Diagnostic skills needed to evaluate STIs in MSM are not taught during training of undergraduate and post-graduate doctors. In 1998, HST began working with community members who had rectal and peri-anal STIs. Recognizing MSM and TG members had low uptake of STI/HIV treatment and follow-up services, HST initiated advocacy and sensitization efforts with doctors, nurses, counselors and other health care providers. It also established working relations with private and public health care institutions in Mumbai. One such center was the Lokmanya Tilak Medical College and General Hospital, locally known as 'Sion Hospital' – a tertiary teaching hospital in a central suburb of Mumbai.

Intervention components

In 1999, HST began collaborating with the Department of Dermatology and Sexually Transmitted Diseases (STD) at Sion Hospital to provide sensitive clinical services for MSM and TG. At that time, the department evaluated about 200 patients per day in the outpatient department. The department also taught undergraduate and postgraduate medical students.

Through the collaboration between HST and the Department of Dermatology & STDs at Sion Hospital, clinical services were established for MSM and TGs at HST's office premises. The efforts to deliver clinical services were supported by the National AIDS Control Organization (NACO), Directorate of Health Services Government of Maharashtra, and the Mumbai Districts AIDS Control Society (MDACS).

Peer outreach workers conducted micro-planning and mapping exercises prior to outreach, in order to identify sites and determine the number of TG and MSM who could potentially benefit. Field-based peer outreach workers of HST were assigned different zones of Mumbai. The outreach staff visited various cruising sites[57] and common congregating points (e.g., railway platforms) to

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[57]Sites (usually a public place) where gay and bisexual men search out sexual partners, sometimes involving the exchange of money for sex.

provide information about STIs, HIV/AIDS and safer sex practices. Those who perceived themselves to be at risk for HIV/STIs were given health cards that provided them with quick access to health services at Sion Hospital, as well as at the HST clinic.

The HST clinic operated three times per week from 5:00 – 8:00 pm. It was staffed by two resident trainee doctors from the STD department and one clinical microbiologist from the microbiology department of Sion Hospital.[58] The doctors received hands-on training from Sion Hospital STD faculty and HST staff in clinical and microbiological diagnoses of STIs among MSM and TG. Routine microscopy for diagnosis of STIs was conducted on-site by the microbiologist. Symptomatic treatment for uncomplicated STIs was provided at the HST clinic and complex STI cases were referred to Sion Hospital. For HIV testing, samples were collected after pre-test counseling and the clients were then asked to report to the STD department of Sion Hospital for test results, post-test counseling, sexual health education and free condoms. This strategy was adopted initially to ensure confidentiality of HIV-related information. HST also received free HIV rapid test kits from MDACS and other donor-supported programs, and based on availability, sometimes HTC was also provided at the HST clinic. All of these services were provided free of cost. STI services were also available at the STD outpatient at Sion Hospital, whenever the MSM/TG client required consultation during day time hours.

If the HIV result was positive, the counselor would discuss treatment and care options, available health care services, and healthy living. When requested, the counselor also coordinated with the designated peer outreach worker for accompanied referral for further health check-ups, including CD4 and viral load testing and initiation of anti-retroviral treatment at the ART center.

Sion clinic staff was sensitized by HST to interact with clients in an empathetic and non-judgmental manner. As a result, the MSM population gradually felt comfortable in accessing the public health system. HST also appointed staff to act as facilitator guides to help peers navigate through the various departments of a hospital as large as Sion Hospital for other health needs.

Implementation challenges

- Ensuring quality of STI/HIV care and a comprehensive range of health services for MSM and TG required significant investment in time and resources. Resource investments included considerable financial and human resources and capacity to provide community members with sustained delivery of care.

- It was sometimes difficult to reach MSM and TGs and maintain regular contact with this highly mobile population. Getting health services to hidden populations such as male sex workers was a big challenge.

- Countering social stigma and discrimination against MSM and TG, and organizations that work with them, always remained a struggle.

- MSM and TG living with HIV are particularly vulnerable to social and familial discrimination. They often withdraw from social interactions and services on learning that they are HIV positive. When unable to get ART through the government program and private treatment costs run high, they sometimes dropped out of the program and services.

- Notification of partners, especially female partners, was always a challenge.

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[58]The doctors worked at the HST clinic pro bono as part of their medical training program.

Lessons learned

- Synergies between partners contributed to the sustainability of HIV and STI services for male and transgender sex workers in the HST–Sion Hospital model, which continues to date. Building effective partnerships required persistence and an investment of time and resources.

- This collaborative model of delivery of services is a good example of reducing costs of salaries/consultancies paid to physicians through a model that relied on the use of existing public health resources. For Sion Hospital, the benefits were that their post-graduate students learned about the sexual health and STIs among MSM and TG.

- Providing integrated health services for MSM and TG requires a supportive policy environment, committed leadership and CBO–government partnership. Almost all aspects of the interventions required support and cooperation from the Sion Hospital and other stakeholders like NACO, MDACS and the Directorate of Health Services. This also provided an excellent foundation for developing linked and integrated services.

- Friendly, non-judgmental staff and privacy for HIV counseling improve uptake. Ensuring that HTC, and STI diagnosis and treatment followed the established national protocols was key to improving the communities' confidence in these services.

Outcomes

The HTC at the HST center is now open six days a week (2pm to 8pm) with four qualified counselors and two lab technicians. By 2007, over 15,000 clients had been examined and treated for STIs since the inception of clinic services in 1999. Encouraged by its successful collaboration with Sion Hospital, HST established partnerships with other hospitals in Mumbai including tertiary care centers like KEM Hospital, Cooper Hospital, and JJ Hospital in order to expand coverage and improve access to HIV/STI services for MSM and TG.

In 2006, HST built the capacity of 25 MSM and TG organizations from across the country for providing similar services. Ongoing training of dermatology residents and medical students provided an important service in sensitizing physicians to the needs of MSM. These doctors became part of a growing pool of doctors who were sensitized to the needs of these KP groups. Many of these trainee doctors joined practices in other parts of the country and continued to be involved with the care of MSM and TG populations. Many were also hired by NGOs and other projects working in the area of HIV prevention for their medical inputs.

One of the greatest achievements of this collaboration has been to empower MSM to access the public health system and receive the services to which they were entitled. The program also left behind a legacy of a large teaching and tertiary care hospital taking the initiative to provide services that addressed the needs of vulnerable key populations marginalized by the public health care sector.
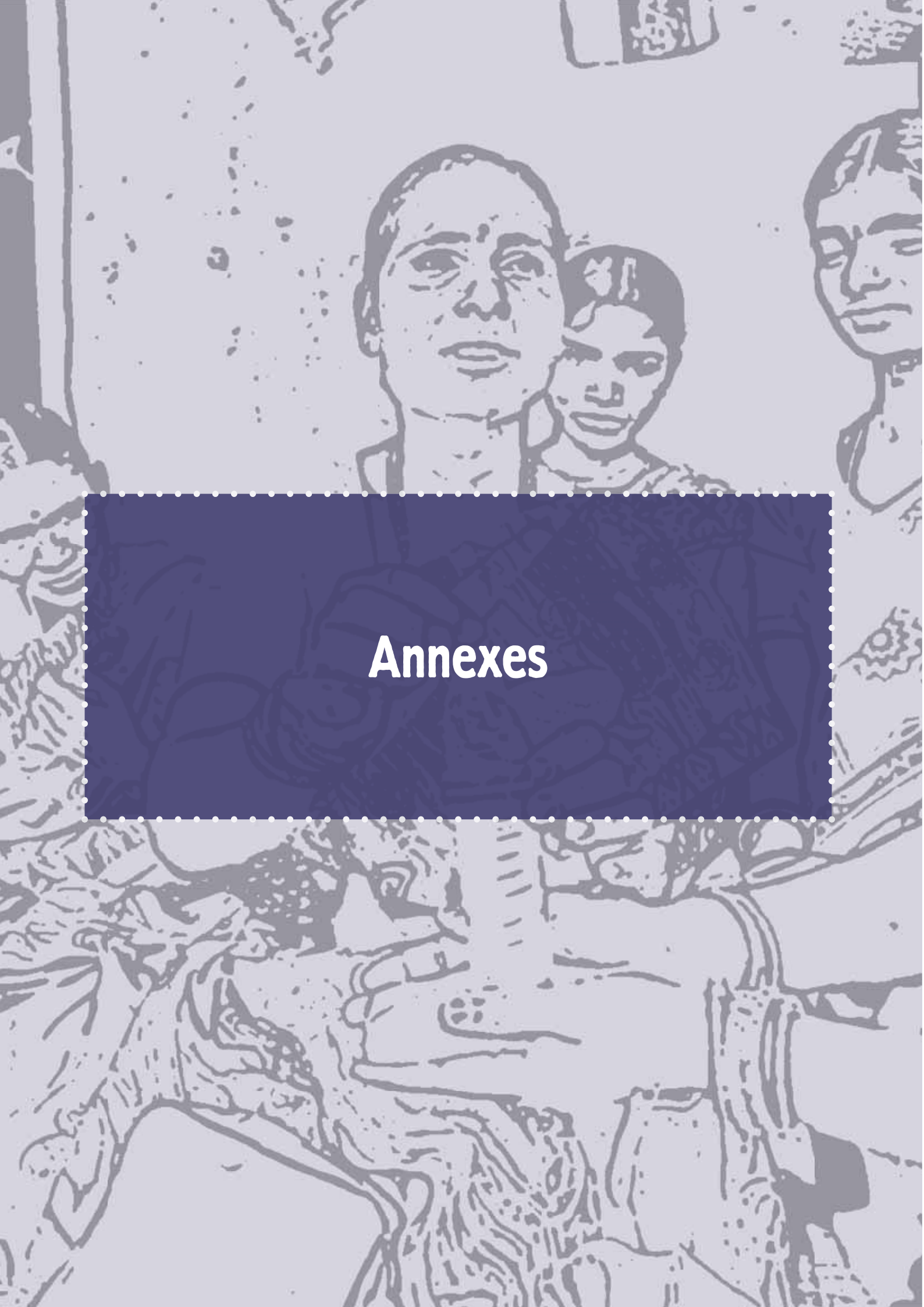
Annexes

Annex A.1.

Quality Monitoring of STI Services – STI Service Standards

A. CLINIC PERFORMANCE

	Clinic Performance (See explanatory notes for guidance on calculating standards A.1 to A.7 below)
A1	**Clinic uptake** = (Total number of KPs who visited the clinic at least once in the past six months) / (Total number of KPs contacted through at least one service in the past six months) X 100
A2	**Clinic orientation to sex workers** = (Total no. of clinic visits by KPs in the previous month) / (Total clinic visits in the previous month) X 100
A3	**Clinic orientation to STI** = (Total no. of STI visits by KPs in the previous month) / (Total clinic visits by KPs in the previous month) X 100
A4	**Clinic performance on monthly STI check-ups** = (Total no. of KPs provided with STI check-up in the previous three months ÷ 3) / (Total number of KPs contacted by at least one service in past 6 months) X 100
A5	**Clinic performance on asymptomatic GC/CT treatment** = (Total number of new KPs or KPs returning to the clinic after six months provided with GC/CT treatment in the previous month) / (Total number of new KPs or KPs returning after six months contacted in the previous month) X 100
A6	**Clinic performance on syphilis screening** = (Total number of KPs who underwent syphilis screening (RPR/ICST) in the previous 6 months) / (Total number of KPs contacted through at least one service in last 6 months) X 100
A7	**RPR-positive KPs started on treatment** = No of RPR-positive KPs started on treatment in last 3 months / Total no of RPR-positive KPs diagnosed in last 3 months) X 100

Calculate score using formula: Score=indicator percentage/20

B. COMMUNITY INVOLVEMENT AND COORDINATION WITH OUTREACH

	N/A	0	1	2	3	4	5
Score							
Method: Interview of program/clinic staff & review of records							
	Yes		No		Notes		
Peer/ORW follow-up KPs for STI services							
KP involved in clinic operations - infection control, registration							
DIC functional - scheduled activities managed by community							
Weekly meetings/ forum for clinic and outreach staff to interact and documented							
Community clinic monitoring system exists / clinic advisory committee provides recommendations and these are acted upon							
Score = Total no. of Yes							

C. STI CLINICAL MANAGEMENT

		N/A	0	1	2	3	4	5
C1	Clinic Staffing and Training Score							
	Method: Interview of clinic staff and program staff							
		Yes		No		Notes		
	Qualified (MBBS) doctor in position							
	Doctor trained on SCM and COGS > 2 days (16 hrs.)							
	Nurse in position							
	Nurse trained on job responsibility > 1 day (8 hrs.)							
	Counselor in position							
	Counselor trained on counseling and COGS > 2 days							
	Score = (Total Yes x 5) / 6							

		N/A	0	1	2	3	4	5
C2	Physician Clinical Performance Score							
	Method: Observation and interview of physician							
		Yes		No		Notes		
	Approachable, friendly and non-judgmental							
	Adequate history taking (present history, sexual history)							
	Proper physical examination (including speculum & proctoscopic exams)							
	Administer syndromic treatment(first-line treatment incl. Benzathine Penicillin)							
	Explain compliance, condoms, contact tracing and follow-up							
	Score = Total no. of Yes							

		N/A	0	1	2	3	4	5
C3	Nurse Performance Score							
	Method: Review of records and interview of nurse							
		Yes		No		Notes		
	System to track monthly medical check-up and follow-up available							
	Able to tell or show speculum decontamination							
	Supervised treatment is provided							
	Explain drug compliance and promote condoms after STI consultation							
	Score = (Total no. of Yes x 5)/4							

		N/A	0	1	2	3	4	5
C4	Counselor Performance Score							
	Method: Interview of counselor							
		Yes		No		Notes		
	Maintains confidentiality and proper documentation of counseling							
	Promote the essential service package for sex workers							

	Explain '4 Cs' (compliance, condoms, contact tracing, counseling)							
	Explain risk reduction counseling (assess risk and barriers, provide options, risk reduction plan, condoms)							
	Define informed choice for HIV testing (explain benefit and risk of HIV testing)							
	Score = Total no. of Yes							
		N/A	0	1	2	3	4	5
C5	Correct STI Case Treatment (SCM and PT) Score							
	Method: Randomly select 10 patient records of present quarter and verify							
	Circle correct treatment and cross (X) incorrect treatments			1	2	3	4	5
				6	7	8	9	10
	Score = Total correct treatments / 2							
		N/A	0	1	2	3	4	5
C6	Completeness of Patient Record Score							
	Method: Randomly select 10 patient records and review							
	Circle on complete and accurate records and cross (X) inaccurate or incomplete record			1	2	3	4	5
				6	7	8	9	10
	Score =Total complete and accurate records / 2							
		N/A	0	1	2	3	4	5
C7	Laboratory Systems for Syphilis Screening Score							
		Yes		No		Notes		
	Laboratory personnel trained on issues related to syphilis screening (RPR, ICS)							
	Laboratory SOPs available							

Laboratory internal quality assurance system in place						
Laboratory external quality assurance system in place						
Proper handling, storage and disposal of specimens and reagents						
Score = Total no. of Yes						

D. REFERRAL NETWORK

		N/A	0	1	2	3	4	5
D1	Referral System and Networks Score							
	Method: Review of records and interview of clinic and program staff							
		Yes		No		Notes		
	Referral directory available and up-to-date							
	Referrals documented (register available and up-to-date)							
	Formal linkages with HIV testing							
	Formal linkages with HIV care and support (including INP+)							
	Referral outcomes are followed up							
	Score = Total no. of Yes							

		N/A	0	1	2	3	4	5
D2	RNTCP linkage Score							
	Method: Review of records and interview of clinic and program staff							
		Yes		No		Notes		
	Clinic staff trained on RNTCP							
	Clinic staff/NGO attend district/TU level RNTCP meeting regularly							
	Clinic has formal linkage with designated microscopy center and other diagnostic center (FNAC/BX/CXR) in the district							

Clinic staff has follow-up mechanisms to ensure that the KPs who are TB suspects complete the diagnostic procedures for TB (3 sputum tests and additional tests if required for sputum negative cases)							
Clinic staff ensures that all the KPs diagnosed with tuberculosis are started on TB treatment							
Avahan TB record is filled correctly and submitted to STI CB monthly							
Score= (Total no. of Yes x 5) / 6							

E. CLINIC OPERATION

		N/A	0	1	2	3	4	5
E1	Clinic Set-up Score							
	Method: Observation and interview of clinic staff							
		Yes		No		Notes		
	Visual and auditory privacy							
	Clean and tidy							
	Well equipped (speculum, proctoscope, condoms, IEC, exam table and light)							
	Clinic signage with appropriate messages and posters in appropriate location							
	Score = (Total no. of Yes x 5) / 4							

		N/A	0	1	2	3	4	5
E2	Infection Control and Waste Management Score							
	Method: Observation and interview of clinic staff							
		Yes		No		Notes		
	Hand washing at site of exam, gloves used in speculum exam							
	Proper disposal of sharps (puncture proof containers, needle cutter)							
	Proper sterilization of speculums and proctoscopes							
	Segregation of waste and proper decontamination before disposal							
	Available biohazard waste disposal system							
	Score = Total no. of Yes							

		N/A	0	1	2	3	4	5
E3	Drug and Condom Supply Management Score							
	Method: Review of records and observations							

		Yes	No	Notes
	Essential STI drugs/kits and condoms available - not expiring, no stock-outs in past 3 months			
	Anaphylaxis kit available (drugs within expiry dates) and properly located			
	Drug inventory list available, up-to-date and tallies with stock			
	Drug re-order level guidelines available in the clinic			
	Drugs arranged systematically by expiry dates			
	Score = Total no. of Yes			

		N/A	0	1	2	3	4	5
E4	Documentation and Reporting Score							
	Method: Review of records							

		Yes	No	Notes
	Individual patients records filed systematically and retrievable			
	Clinic registers are complete and up-to-date			
	Variables in clinic registry filled based on COGS/Avahan definition			
	Reports are submitted timely			
	Clinic data analyzed and utilized			
	Score = Total no. of Yes			

		N/A	0	1	2	3	4	5
E5	Ethical Standards and Confidentiality Score							
	Method: Observations							
		Yes		No		Notes		
	Confidentiality maintained at all stations (e.g., HIV status)							
	Confidentiality agreement signed by staff							
	Confidentiality policy and patients' rights displayed in the clinic							
	Clinic records and reports are kept in locked files							
	Score = (Total no. of Yes x 5) / 4							

F. TECHNICAL SUPPORT								
		N/A	0	1	2	3	4	5
	Technical Support Score							
	Method: To be filled by the STC Supervisor							
		Yes		No		Notes		
	Number of supportive visits conducted by STC in last 90 days (write exact number of visits under Yes category)							
	STC maintains clinic-wise quality monitoring tool							
	Score = (Total no. of Yesx5) / 4							

Annex A.2.

List of essential supplies and equipment for Avahan

General

1. Access to a male and female toilet

2. Fans, as needed

3. Private, soundproof rooms

4. Sink with running water for washing hands, cleaning equipment, etc.

5. Electricity supply (or batteries for lights)

6. Waste basket in all rooms

7. Mops, brooms, and other equipment to clean the clinic

Waiting and Registration Area

1. Clinic record system – Including data summary sheets for attendance and surveillance purposes

2. Filing cabinet – Lockable

3. Desks

4. Chairs

5. Telephone

6. Chairs for waiting room

Optional (funds and staff permitting):
Computer

Printer

Modem

Fax

Potted plants for waiting room

Consultation and Examination Room

For examination:

1. Screens for privacy

2. Examination couch – Ideally with steps and "cut-away" recess for speculum examination

3. Examining chair (preferably with wheels)

4. Sheets for examination couch

5. Pillow for examination couch

6. Good examination light – Preferably wall-mounted

7. Torch with fresh batteries and backup supply of batteries

8. Gooseneck lamp – Halogen bulb preferred

9. Kelly pad or other waterproof sheeting

10. Hand mirror

General medical:

11. Sphygmomanometer

12. Stethoscope

13. Thermometer

14. Adult weighing scales

15. Medicine cabinet

Instruments and sterilization:

16. Sterilizer or access to sterilization facilities

17. Scissors

18. Instrument tray with cover

19. Movable instrument holder

20. Cotton ball holder

21. Cotton tip holder

22. Vaginal specula of various sizes

23. Speculum holder

24. Proctoscopes/anoscopes

25. Ovum forceps

26. Uterine forceps

Medical Supplies—Consumables
27. Needles and syringes--disposable

28. Cotton wool

29. Gauze pads (2x2 and 4x4)

30. Examination gloves, latex

31. Sterile cotton-tipped applicators – Small (sterile individually wrapped and non-sterile), large (for cleaning the cervix)

32. Microscope slides and cover slips

33. Water-soluble lubricant for clinical examination

34. Disposable tissues

35. Tongue depressors, disposable

36. pH paper (4–7 range)

37. 10% potassium hydroxide solution

38. Physiological saline solution

39. Disinfectant (sodium hypochlorite)

40. 70% isopropyl alcohol

41. Distilled water

42. Male latex condoms

43. Male polyurethane condoms (if available, for patients allergic to latex)

44. Female condoms (if available)

45. Water-based lubricant for distribution

46. Demonstrators for male condom use (e.g., wooden dildos)

47. Sharps disposal containers

Pharmaceuticals for Management of STIs, PEP, and Anaphylactic Reaction
48. Supply of drugs as listed under Sections 3f, 3g, and 5d

49. Secure system for storing drugs appropriately

50. Stock management system

51. Record system

Laboratory (if available)

General:

1. Binocular microscope

2. Spare bulbs for microscope

3. Spare fuses for microscope

4. Waste basket suitable for laboratory

5. Refrigerator

Equipment, Reagents and Consumables for Specific Tests:

1. Microscopy for vaginal and cervical swabs

2. Alcohol lamp

3. Staining rack

4. Glass slides, frosted end

5. Cover slip (22x22mm)

6. Cotton tipped swabs (sterile and non-sterile)

7. Gram stain kit

8. Potassium hydroxide 10% solution

9. Sterile distilled water

10. Normal saline solution

11. Syphilis RPR
    a. Rotator
    b. Centrifuge
    c. RPR kit and controls
    d. RPR cards

12. Micropipette (200 µL, 1000 µL, adjustable volume)

13. Yellow pipette tips

14. Test tubes (12x75mm)

Counseling Room

1. Comfortable chairs for patient and counselor

Optional:

2. Flipchart with stand

3. Television and video cassette recorder

4. Overhead projector with tripod

5. Whiteboard

Annex A.3.

Avahan Phase-II Routine STI Monitoring Indicators for FSW and HR-MSM

		STI uptake	
20		Number of key population individuals receiving clinic consultations (STI or non-STI) during the month	Includes individual KPs who receive clinical consultations at the clinic during the month. The visit could be for any reason- STI or non STI. If a KP visits the clinic more than once during the month, count the KP only once.
21		Number of key population individuals receiving STI consultations during the month	Includes individual KP's who receive STI consultations at the clinic during the month. STI consultations include STI symptoms, STI follow up and STI check-up visits. If a KP visits the clinic more than once during the month for an STI consultation, count the KP only once.
		New - Repeat	
	21.1	New	Key population individuals who have received an STI consultation for the first time at the clinic
	21.2	Repeat	Key population individuals who have received an STI consultation at subsequent visits to the clinic
		Peer - KP members who are not peers	
	21.3	Peers who receive STI consults	
	21.4	KP members who are not peers who receive STI consults	

22		Type of visit (from the health provider's perspective)	This indicator is to be filled in after the clinical procedures are completed. For each visit, there should be only one category (out of STI symptom visit, STI follow up, Regular STI check-up, General ailment) which is ticked as per the health provider's perspective. This should also be equal to the total number of Clinic Encounter Forms (CEF) filled in during the month.
	22.1	STI symptom	The individual complained of symptoms of STI and was treated accordingly. This will correspond to the indicator 'First clinic visit for the index STI/RTI complaint' in Section A, NACO's STD monthly input form.
	22.11	New STI symptom visit	Key population individual's first visit to the clinic for STI symptoms.If the individual previously visited the clinic for general health services (non-STI) or STI check-up, but this is the first time he/she is attending the clinic with STI symptoms, this is still considered to be a new STI symptom visit
	22.12	Repeat STI symptom visit	Key population individuals who have attended the clinic earlier with STI symptoms.
	22.2	STI follow up	The individual returned to the clinic within two weeks of last treatment for a review by the doctor for their previous STI. This may happen for many reasons (e.g. symptoms not cleared, allergic to medicines, would like a review by the doctor, etc.). If the individual accesses the clinic more than two weeks after the last visit to the clinic, it should not be marked as a follow-up visit. This corresponds to the indicator 'Repeat STI/RTI visit for the index STI/RTI complaint' in Section A, NACO's STD monthly input form.
	22.3	STI checkup	The individual does not complain of STI symptoms but receives genital examination which may include speculum or proctoscope examination and/or presumptive STI treatment. This will also include those individuals who came to the clinic for general health complaints and received an STI chec- up including genital examination which may include speculum or proctoscopic examination and/or presumptive STI treatment.
	22.4	General Ailment	The individual received clinical care for any non STI reason. This would include minor ailments like cough/ diarrhoea, screening for TB and prophylaxis/treatment of opportunistic infections in HIV positive individuals.

23		Number of key population individuals receiving STI consultations during the quarter	Number of unique individuals who accessed clinic services in a quarter; individuals who visit multiple times in a quarter should be counted only once
	23.1	Peers receiving STI consults in the quarter	
	23.2	KP members who are not peers who receive STI consults during the quarter	
	23.3	FSW Typology	
	23.31	Brothel	
	23.32	Lodge	
	23.33	Street	
	23.34	Home	
	23.35	Other / Bar Girls	
	23.36	Tamasha	
24		Number of key population individuals with repeat STI symptom visits having symptom duration > 7 days	Individuals making repeat visit for STI symptoms (captured in indicator no. 22.12) who report symptom duration as > 7 days
25		Number of STI consultations	The number of STI consultations provided to key population and non-key populations (regular partners/ others) during the reporting period. The total number of consultations is reported and not the number of individuals.
	25.1	Key population	
	25.2	Non - key population	
	25.3	STI consultations by type of clinic	Break-up of the STI consultations provided at the following clinical service delivery models:
	25.31	Static	
	25.32	Outreach	
	25.33	Mobile Clinic Vans	
	25.34	Referral provider	

26		Number of key population individuals receiving STI consultations who underwent an internal examination	Key populations attending clinic for any STI consultation (symptom, follow up or STI checkup) who underwent internal examinations (vaginal or anal) as part of the consultation
	26.1	Peers	
	26.2	Non-peers	
27		Number of STI syndromes treated by type	IP should report the number of syndromes according to the type of syndrome. A syndrome refers to the diagnosis by the health care provider. As the syndrome is tracked and not the individual, a person who has multiple syndromes should be counted under each syndrome separately.
	27.1	Vaginal / cervical discharge	Women complaining of vaginal discharge and/or vaginal/cervical discharge detected on speculum examination
	27.2	Genital ulcer disease-herpetic	Men/women/transgenders with genital or ano-rectal blisters (vesicles) with history of recurrence
	27.3	Genital ulcer disease-non herpetic	Men/women/transgenders with genital or ano-rectal ulcers
	27.4	Lower abdominal pain	Women with pain/tenderness in the lower abdomen and cervical motion tenderness detected on internal (bimanual) examination
	27.5	Urethral discharge	Men/transgenders with dysuria and/or urethral discharge
	27.6	Ano-rectal discharge	Men/transgenders with complaints of anal discharge/ tenesmus and/or ano-rectal discharge seen on proctoscopic examination
	27.7	Scrotal swelling	Male or transgender with painful scrotal swelling
	27.8	Inguinal bubo	Men/women/transgender with enlarged lymph nodes in inguinal area
	27.9	Genital scabies	Men/women/transgenders with scabies in the ano genital area
	27.10	Genital molluscum	Men/women/transgenders with molluscum in the ano genital area
	27.11	Genital pediculosis	Men/women/transgenders with pubic hair lice infestation
	27.12	Genital warts	Men/women/transgenders with warts in the ano genital area

	27.13	Asymptomatic	Men/women/transgenders with no complaints of STIs and no signs of STIs detected on examination.
	27.14	Others, specify	Any other STIs not mentioned above
28		Number of key population individuals receiving presumptive treatment	The number of individuals in the target community who do not have symptoms/signs of STIs but who received treatment for gonorrhea and chlamydia. Presumptive treatment is to be given one time at the first clinic visit of a key population individual. In case the individual does not come to the clinic for an STI consultation including STI check-up for 6 months or more, presumptive treatment will be repeated.
	28.1	Individuals receiving first time presumptive treatment	All KPs coming to the clinic for the first STI consultation (captured in indicator no. 21.1) should receive treatment for gonorrhea and chlamydia, either as part of the STI treatment for STI symptoms or given as presumptive treatment for asymptomatic individuals
29		Number of key population individuals counseled	A counseling session takes place between a counselor and a beneficiary in the STI clinic or drop in center. If one individual receives multiple counseling sessions in a reporting period, the individual should be counted once. A counseling session should cover the following areas- condom promotion (including demo on correct condom use), partner management (for cases diagnosed with STIs), treatment compliance (for cases diagnosed with STIs which require prolonged treatment), individualized risk assessment and risk reduction counseling, encouraging KP to visit ICTC
30		Number of key population individuals screened/tested for syphilis	Number of key population individuals who were screened/tested for syphilis by RPR/VDRL/rapid strip test either on site at the clinic or through referral linkages with laboratories
	30.1	Number of key population individuals tested positive for syphilis by screening tests	Number of key population individuals who were reactive or positive in screening tests for syphilis
31		Total number of key population individuals who have visited the clinic at least once	This is the cumulative figure of the total number of key population individuals who have visited the clinic at least once (for STI or non STI consultation as determined by the health provider) from the beginning of the program

32		Referrals	The indicators below are the individuals referred to other facilities for HIV testing, care and support and TB diagnosis/treatment
	32.1	Number of key population individuals referred to ICTC for HIV testing	Total number of key population individuals who were referred to the ICTC in the month
	32.2	Number of key population individuals who visited the ICTC	Total number of key population individuals who went to the ICTC in the month
	32.3	Number of key population individuals tested at the ICTC	Total number of key population individuals who were tested for HIV at the ICTC in the month
	32.4	Number of key population individuals found positive	Total number of key population individuals who tested positive for HIV in the month
	32.5	Number of key population individuals referred to Drop in center for PLHAs	Total number of key population HIV positive individuals who were referred to Drop-in-center (DIC) for PLHAs
	32.6	Number of key population individuals referred to HIV Care (ART Center)	Total number of key population HIV positive individuals who were referred for HIV care (for baseline CD4 count/ opportunistic infection management/ antiretroviral therapy)
	32.7	Number of key population individuals who are TB suspects referred to DMC for diagnosis	The number of key population individuals who are identified as TB suspects at the clinic and referred to the Diagnostic Microscopy Center of RNTCP for diagnosis of TB
	32.8	Number of key population individuals with confirmed TB initiated on DOTS	The number of key population individuals diagnosed with TB who have been initiated on Directly Observed Treatment Short-course regime

References

Adhikary, R., Gautam, A., Lenka, S.R. et al 2012. Decline in unprotected sex and sexually transmitted infections (STIs) among female sex workers from repeated behavioural & biological surveys in three southern states of India. *India J Med Res,* 136 (Supplement), pp.5-13.

Alliance 2010. *Mythri mainstreaming model: A new initiative for delivery of STI services. India HIV/AIDS Alliance. (Available at* http://issuu.com/aids_alliance/docs/mythri-mainstreaming-model, accessed 12 June 2014)

Alliance 2012. *Key Linkages & Key Populations: Is HIV/SRHR Integration Serving the Needs of Vulnerable Communities? Policy Brief*. New Delhi: India HIV/AIDS Alliance.

Beattie, T.S., Mohan, H.L., Bhattacharjee, P. et al 2014. Community mobilization and empowerment of female sex workers in Karnataka state, South India: Associations with HIV and Sexually Transmitted Infections Risk. *Am J Public Health*. Published online ahead of print June 12, 2014; e1-e10, doi: 10.21.2105/AJPH.2014.301911

Bhardwaj, S., Ramesh, S., Gaikwad, S. 2014. Influence of Customized Demand Generation as a Strategy to Increase Uptake of Voluntary Counseling and Testing Services amongst Sex Workers in Mumbai and Thane. World Journal of AIDS, 4, pp.139-147. http://dx.doi.org/10.4236/wja.2014.42018

BMGF 2010a. *Avahan's Common Minimum Program for HIV Prevention in India*. New Delhi: Bill & Melinda Gates Foundation.

BMGF 2010b. Treat and Prevent: *Avahan's Experience in Scaling Up STI Services to Groups at High Risk of HIV Infection in India*. New Delhi: Bill & Melinda Gates Foundation.

BMGF 2013. *Micro-Planning in Peer Led Outreach Programs—A Handbook*. New Delhi: Bill & Melinda Gates Foundation, 2013. Available at: http://futuresgroup.com/files/publications/Microplanning_Handbook_1-30-13.pdf, accessed 20 April 2014).

Chakrapani, V., Shanmugam, M., Michael, S., Velayudham, J., Newman P.A. 2008. HIV Testing Barriers and Facilitators among Populations at-risk in Chennai, India. Indian Network for People living with HIV (INP+), Chennai, India; June 2008.

Chakrapani, V., Kershaw, T., Shunmugam, M., Newman, P.A., Cornman, D.H., Dubrow, R. 2011. Prevalence of and barriers to dual-contraceptive methods use among married men and women living with HIV in India, *Infectious Diseases in Obstetrics and Gynecology*, vol. 2011, Article ID 376432, 8 pages.

Colvin, M., Bachmann, M.O., Homan, R.K. et al 2006. Effectiveness and cost effectiveness of syndromic sexually transmitted infection packages in South African primary care: cluster randomized trial. *Sex Transm Infect,* 82, pp.290-294.

CTD 2011. *TB India 2011, Revised National Tuberculosis Control Programme, Annual status r*eport. New Delhi: Central TB Division, Directorate General of Health Services, Government of India.

Dallabetta, G., Chandrasekaran, P., Wheeler, T. et al 2014. Rolling out new bio-medical HIV prevention tools: What can be learned from Avahan, the India AIDS initiative. *Sexual Health*, *http://dx.doi.org/10.1071/SH 14064*. Published on-line 03 July 2014 www.publish.csiro.au/journals/sh

Das, A., Narayanan, P., Gurung, A. et al 2011. Quality and uptake of services in Avahan clinics with differing levels of community involvement in promoting STI services. Oral presentation, 12th International Union against Sexually Transmitted Infections-World Meeting, New Delhi, India, Nov 2011.

Davidson, S. 1998. Spinning the wheel of empowerment. *Planning*, 1262, pp.14-15.

Delhikar, D.L., Homan, F. & Das, A. 2013. Evaluation of cost and efficiency of alternative STI service delivery models for providing STI services to high risk individuals in India. Poster presented at STI & AIDS World Congress, Vienna, Austria, July 2013.

FHI 2001. *Behavioural Surveillance Survey in Highway Project, India*. Impact assessment for HIV/STI prevention programmes: Baseline report series, New Delhi: DFID/FHI.

FHI 2007. *Clinic Operational Guidelines and Standards: Comprehensive STI Services for Sex Workers in Avahan-supported Clinics in India*. New Delhi: Family Health International.

FHI 2009. Report of Avahan clinics costing exercise, Dec 2009. FHI internal document.

FHI 360 2011. *Revised Operational Guidelines for Avahan Clinical Services*. New Delhi: FHI 360

Gupte, S., Daly, C., Aggarwal, V. et al 2011. Introduction of rapid tests for large scale syphilis screening among female, male and transgender sex workers in Mumbai, India. *Sexually Transmitted Diseases*,38 (6), pp.499-502.

ICMR and FHI 2007. *National Interim Summary Report: Integrated Behavioural and Biological Assessment (IBBA), Round 1 (2005-2007)*. New Delhi, India: Indian Council of Medical Research and Family Health International. (Available at: http://www.nari-icmr.res.in/IBBA/IBBA-NISR.pdf, accessed 20 May 2014).

ICMR and FHI 2011. *National Summary Report: Integrated Behavioural and Biological Assessment (IBBA), Round 2 (2009-2010)*. New Delhi, India: Indian Council of Medical Research and FHI 360.

Jacobs, B., Kambugu, F.S., Whitworth, J.A. et al 2003. Social marketing of pre-packaged treatment for men with urethral discharge (Clear Seven) in Uganda. *Int J STD AIDS,* 14(3), pp.216-21.

Juneja, S., Rao Tirumalasetti, V., Mishra, R.M., Sethu, S., Singh, I.R. 2013. Impact of an HIV prevention intervention on condom use among long distance truckers in India. *AIDS and Behavior,* 17(3): 1040.

Kanth, R., Tucker, S., Parimi, P., Vejella, S. 2012. Public-private partnership as a sustainable model for STI service delivery: evidence from Avahan-supported interventions in Andhra Pradesh, India. Poster presented at the International AIDS Conference, Washington DC, USA, July 2012.

Mabey, D., Peeling R.W. et al 2006. Prospective, multi-center clinic-based evaluation of four rapid diagnostic tests for syphilis. *Sex Transm Inf ,* 82:V13-V16

Mogasale, V., Wi, T., Das, A. et al 2010. Quality assurance and quality improvement using supportive supervision in a large-scale STI intervention with sex workers, men who have sex with men/transgenders and injecting drug users in India, *Sex Transm Infect,* 86, pp.i83-i88.

MSMGF 2010. *In our own words: Preferences, Values, and Perspectives on HIV Prevention and Treatment: A Civil Society Consultation with MSM & Transgender People.* Oakland, CA: The Global Forum on MSM & HIV, Dec 2010.

NACO 2001a. *National Baseline General Population Behavioural Surveillance Survey,* New Delhi: National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India.

NACO 2001b. *National Baseline High-risk and Bridge Population Behavioural Surveillance Survey, Part 1 (FSWs and their clients),* New Delhi: National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India.

NACO 2003. *HIV Sentinel Surveillance 2003,* New Delhi: National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India.

NACO 2004. *HIV Sentinel Surveillance 2004,* New Delhi: National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India.

NACO 2007a. *HIV Sentinel Surveillance 2007,* New Delhi: National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India.

NACO 2007b. *Operational Guidelines for Programme Managers and Service Providers for Strengthening STI/RTI services.* New Delhi: National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India.

NACO 2009. National AIDS Control Organisation's Revised Costing Guidelines for Targeted Interventions working with HRGs under NACP III.

NACO and CTD 2013. *National Framework for Joint HIV/TB Collaborative Activities, Nov 2013.* New Delhi: Department of AIDS Control, Ministry of Health and Family Welfare, Government of India.

Pandey, A, Mishra, R.M., Sahu, D., Benara, S.K., Sengupta, U., Paranjape, R.S. et al 2011. Heading towards the safer highways: an assessment of the Avahan prevention programme among long distance truck drivers in India. *BMC Public Health,* 11(suppl 6):S15

Rao, V.T., Mahapatra, B., Juneja, S., Singh, I.R. 2013. Evaluating the McDonald's business model for HIV prevention among truckers to improve program coverage and service utilization in India, 2004-2010. *HIV/AIDS –Research & Palliative Care,*5, pp.51-60.

Reza-Paul, S., Beattie, T., Syed, H.U.R., et al 2008. Declines in risk behaviour and sexually transmitted infection prevalence following a community-led HIV preventive intervention among female sex workers in Mysore, India. *AIDS,* 22 (suppl 5), pp.S91-S100.

Saggurti, N., Mishra, R.M., Proddutoor, L. et al 2013. Community collectivization and its association with consistent condom use and STI treatment-seeking behaviours among female sex workers and high-risk men who have sex with men/transgenders in Andhra Pradesh, India. *AIDS Care,* Volume 25, Supplement 1, pp.55-66.

Sgaier S.K., Ramakrishnan, A., Dhingra, N., Wadhwani, A., Alexander, A., Bennett, S., Bhalla, A., Kumta, S., Jayaram, M., Gupta, P., Piot, P.K., Bertozzi, S.M., Anthony, J. 2013. How the Avahan HIV Prevention Program Transitioned From The Gates Foundation To The Government Of India. *Health Affairs,* 32 (7), pp.1265-1273.

Singh, I.R., Vij, T., Bhalla, A. 2008. Point of purchase pre-packaged treatment kits increased STI treatment treatment compliance at truck-stop clinics in India: Avahan funded TCI Foundation Project Kavach. Poster presented at the International AIDS Conference, Vienna, Austria, July 2008.

Steen, R., Mogasale, V., Wi, T. et al. 2006. Pursuing scale and quality in STI interventions with sex workers: initial results from Avahan India AIDS Initiative. *Sexually transmitted infections,* 82(5), pp.381-385.

Sweat, M., Morin, S., Celentano, D., Mulawa, M., Singh, B., Mbwambo, J., et al 2011. Community-based intervention to increase HIV testing and case detection in people aged 16-32 years in Tanzania, Zimbabwe, and Thailand (NIMH Project Accept, HPTN 043): a randomised study. *The Lancet Infectious Diseases,* 11(7), pp.525-532.

TAI-VHS 2013. *Good Practice Documentation – Community Ownership in STI/HIV/AIDS Prevention program in Tamil Nadu.* TAI-VHS-Avahan (Available at: www.taivhs.org/pdf/Community.pdf , accessed 12 June 2014).

Tbcindia.nic.in, (2014). *TBC India*. [online] Available at: http://www.tbcindia.nic.in/, accessed 12 June 2014.

TNS Mode and FHI 2001. Health Care Provider Survey in Healthy Highways Project, India, Summary report. New Delhi: TNS Mode and Family Health International.

Todd, C. S., Nasir, A., Raza Stanekzai, M., Scott, P.T., Strathdee, S.A., Botros, B.A., Tjaden J. 2010. Contraceptive utilization and pregnancy termination among female sex workers in Afghanistan, *Journal of Women's Health,* 19 (11), pp.2057–2062.

UNAIDS 2011. *HIV in Asia and the Pacific: Getting to Zero*. The Joint United Nations Programme on HIV/AIDS.

Wayal, S., Cowan, F., Warner, P., Copas, A., Mabey, D. and Shahmanesh, M. 2011. Contraceptive practices, sexual and reproductive health needs of HIV-positive and negative female sex workers in Goa, India, *Sexually Transmitted Infections,* 87 (1):58–64.

Wheeler, T., Kira, U., Dallabetta, G. et al 2012. Learning about scale, measurement and community mobilization: reflection on the implementation of the Avahan HIV/AIDS initiative in India. J *Epidemiol Community Health,* 66:ii16-ii25.

WHO 2006. *The use of rapid syphilis tests.* The Sexually Transmitted Diseases Diagnostics Initiative (SDI). Geneva: Special Programme for Research & Training in Tropical Diseases (TDR) sponsored by UNICEF/UNDP/World Bank/WHO.

WHO 2012. *Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low- and middle-income countries: Recommendations for a public health approach.* Geneva: WHO/UNFPA/UNAIDS/NSWP. (Available at: http://www.who.int/hiv/pub/guidelines/sex_worker/en/, accessed 20 May 2014).

WHO 2013a. *Implementing comprehensive HIV/STI programmes with sex workers: Practical approaches from collaborative interventions.* Geneva: WHO/UNFPA/UNAIDS/NSWP/World Bank. (Available at: http://www.who.int/hiv/pub/sti/sex_worker_implementation/en/, accessed 20 May 2014).

WHO 2013b. *Laboratory diagnosis of sexually transmitted infections, including human immunodeficiency virus.* WHO Geneva. (Available at: http://www.who.int/reproductivehealth/publications/rtis/9789241505840/en/, accessed 12 June 2014).

WHO 2013c. *Global Tuberculosis Report 2013.* WHO Geneva. (Available at http://www.who.int/tb/publications/global_report/en/, accessed 6 June 2014).

WHO 2013d. Consolidated Guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: Recommendations for a public health approach, June 2013. WHO Geneva.

WHO 2014. Tuberculosis fact sheet. (Available at: http://www.who.int/tb/challenges/hiv/faq/en/, accessed 6 June 2014).

Glossary

Allopathic/MBBS doctors: allopathic [modern system of medicine]/ Bachelor of Medicine and Bachelor of Surgery (MBBS) doctors, either from the private sector or government clinics contracted for their off-duty hours

ART center: centers dispensing free antiretroviral drugs in medical colleges, district hospitals and non-profit charitable institutions providing care, support and treatment services to people living with HIV/AIDS (PLHIV). A PLHIV network person was stationed in each of these ART centers to facilitate access to care and treatment services. ART centers also provide counseling and follow-up on treatment adherence and support through community care centers.

Auxiliary Nurse Midwife: A nurse midwife trained in reproductive health and is employed by the government health care system and private health care institutions. Most of the nurses at Avahan clinics were auxiliary nurse midwives.

Behavioral Surveillance Survey (BSS): serial surveys done to track HIV risk behaviors over time as part of an integrated surveillance system which monitors various aspects of the HIV epidemic. BSS was also conducted by the Avahan program in non-IBBA districts.

Clinic Operational Guidelines and Standards (COGS): a tool developed by FHI 360 in partnership with the World Health Organization (WHO) to provide common approaches for STI prevention and management strategies, and operating guidelines and standards for Avahan-supported STI clinics. It complemented the existing national guidelines on STI management by the National AIDS Control Organization (NACO).

Community based organizations (CBOs) in the Avahan context are locally formed organizations of high-risk individuals which seek to provide support, capacity building, and other resources to its members so that they can hold systems accountable for effective HIV prevention services, and advocate for other services that they require. CBOs may also carry out self-help initiatives and more general advocacy for high-risk groups. Membership in a CBO often entails a nominal annual fee, and regular attendance at meetings is expected. Leadership positions in the CBO are filled through election by the membership.

Community health center (CHC): the third tier of the network of rural health care institutions, which act primarily as referral centers for the neighboring primary health centers (PHCs) for the patients requiring specialized health care services. CHCs serve a population of 80,000 – 120,000 and are equipped with: specialists in the areas of medicine, surgery, pediatrics and gynecology; facilities for indoor patients; and operation theatre, labor room, X-ray machine, pathological laboratory, along with the complementary medical and para medical staff.

District AIDS Prevention Control Unit (DAPCU): DAPCUs have been established in high HIV prevalence districts of India and are supervised by the respective State AIDS Control Society. It is expected to play a pivotal role in monitoring and coordination of service delivery from different facilities in the district.

Designated microscopy center (DMC): provides TB sputum smear microscopy services under the Revised National Tuberculosis Control Program (RNCTP). Each DMC caters to an approximate population of 100,000. The network of DMCs is supported by larger regional laboratories.

Designated STI/ RTI Clinic (DSRC): located in the medical college hospitals, government general hospitals, district hospitals and area hospitals, which are supported by NACO. These clinics provide STI management including counseling and appropriate treatment to general and key populations as per national guidelines. DSRCs report service statistics to the STI CMIS of NACO.

Drop-in center (DIC): a safe place for people (KPs, PLHIV) to talk to each other and get away from their daily life and out of their houses. In addition to the social setting, the drop-in center may offer food, clinical services, BCC sessions, vocational training, etc.

Essential service package: As described in the COGS for STI management for KPs, the essential service components included management of asymptomatic and symptomatic STIs, counseling and referral systems for related services (such as HIV testing) not provided on-site at Avahan clinics.

General nurse midwife: nurse midwives with a higher level of basic education and nursing training including for general health. A few of the nurses at Avahan clinics were general nurse midwives.

High-risk men who have sex with men (HR-MSM) are self-identified MSM to whom Avahan provided services. This group of men is not representative of all MSM in India. In the settings where Avahan worked, they were at high risk on account of their large numbers of sex partners and the fact that a disproportionate percentage sold sex or practiced anal sex.

HIV Sentinel Surveillance (HSS): a system for HIV epidemic monitoring that provides essential information to estimate the HIV prevalence and understand the trends and dynamics of the HIV epidemic among different population groups in a country/region. In India, it helps the National AIDS Control Program (NACP) in refining its strategies and prioritization for HIV-related interventions.

Hotspot: areas within a site with a significant concentration of KPs. Within hotspots, KPs may solicit, cruise, interact with other KP members, have sex or share drugs and injecting equipment.

Integrated Behavioral and Biological Assessment (IBBA): large behavioral and biological assessments conducted in the six high HIV prevalence states of India and along the national highways among female sex workers (FSWs) and their clients, high-risk men who have sex with men (HR-MSM), people who inject drugs (PWID) and long-distance truck drivers. The first round of

the IBBA was conducted between 2005 and 2007 and the second round between 2009 and 2010. The IBBA was a significant component of the overall evaluation strategy of the Avahan program.

Integrated counseling and testing center (ICTC): Earlier called voluntary counseling and testing centers (VCTCs), these facilities and those providing prevention of parent-to-child transmission of HIV/AIDS (PPTCT) services are now remodeled as a hub to deliver integrated services to all clients under one roof and were renamed "Integrated Counseling and Testing Centers". ICTCs offer confidential HIV counseling, risk assessment and voluntary HIV testing.

Key populations (KPs): persons engaging in behaviors that place them at higher risk of HIV infection than in the general population. KPs are divided into most-at-risk groups (female sex workers, people who inject drugs, men who have sex with men) and vulnerable groups (migrant workers, truckers and clients of sex workers).

Mandal: an administrative division in India. The term is most commonly used in the state of Andhra Pradesh, and may also be referred to as a *taluka* (especially in Karnataka and Maharashtra) or a *tehsil*. A mandal has a city or town that serves as its headquarters, with possible additional towns, and usually a number of villages. *Mandal* is the second layer of the three-tier local government system (also called *Panchayathi Raj* system) in India. At the top is the district (called *zilla* in Hindi) and at the bottom are the villages *(gram panchayats)*. A typical district in a state will have approximately 10-15 *mandals*.

Micro-planning: a process involving identification and/or validation of specific locations within a large region where services are to be located, collection of more in-depth information about target groups in those areas, detailed service implementation planning, service provision, and routine evaluation.

National AIDS Control Program III (NACP-III): NACP-III was implemented by NACO from 2006 to 2011, with a goal to halt and reverse the HIV epidemic in India. The main focus areas were saturation coverage of KPs through targeted interventions, scaled-up interventions for the general population, integration and augmentation of systems and human resources in prevention, care, support and treatment at district, state and national levels.

National Rural Health Mission (NRHM): an initiative undertaken by the Government of India to address the health needs of the underserved rural areas. It provides accessible, affordable and quality health care to the rural population, especially the vulnerable groups.

NGO outreach workers are experienced peer outreach workers or professionally trained social workers employed by an implementing NGO to supervise between five and seven peer outreach workers each. An NGO typically has five to ten such outreach workers on its staff.

Peer outreach workers are representative members of a community who serve as a link between the program and the community. They manage the program on the ground through outreach and serve a population with whom they have a similar occupational, behavioral, social or environmental experience and among whom they are trusted and a role model. Peer outreach workers work with 30-60 members of their community to influence attitudes and provide support to change risky behaviors. They are usually provided a stipend for the part-time work (about two-three hours a day) paid by the NGO/CBO providing HIV prevention services to key populations.

Polling Booth Survey: a novel data collection methodology where, in contrast to face-to-face survey interviews, respondents give their responses through a ballot box in an anonymous and unlinked manner. Findings from these surveys, in comparison with those from face-to-face survey interviews, reflect a lesser degree of social desirability bias.

Positive prevention: also referred to as 'positive health, dignity and prevention (PHDP), with an expanded scope to address both prevention and treatment simultaneously and holistically. The goal is to improve dignity, quality and length of life of people living with HIV (PLHIV).

Preferred providers: private health care providers identified by the local implementing NGO/CBO for providing STI care to KPs. These providers received STI training from the NGO and used Avahan's STI pre-packaged syndrome treatment kits. They also received support for documentation and counseling on designated clinic days. Preferred providers were usually hired for delivering services in areas where there were fewer numbers of sex workers.

Primary health care center (PHC): state-owned rural health care facilities in India. They are an essential part of the government-funded public health system in India and each caters to a population of 20,000 - 30,000. They are basic single-physician clinics, usually with facilities for infant immunization, prevention and control of locally endemic diseases, maternal-child health, birth control, safe water supply and basic sanitation, education about health, and minor surgeries.

Rapid plasma reagin (RPR): a screening test for syphilis and is similar to the Venereal Disease Research Laboratory (VDRL) test. It detects antibodies that are present in the blood of people who have the infection. The test is used to screen people who have symptoms of sexually transmitted infections and is routinely used to screen pregnant women.

Regular medical check-up: KPs were encouraged to visit the project clinic for clinical screening for STIs on a regular basis (usually quarterly). Clinics and peer outreach workers promoted regular check-ups to detect signs of STIs by speculum/bimanual/proctoscopic examination, and twice-yearly serological testing and appropriate management for syphilis.

State AIDS Control Society (SACS): state-level body of the National AIDS Control Organization (NACO) that implement the National AIDS Control Program (NACP) at the state level and have functional independence to expand programs and add innovations. The SACS play a pivotal role in the state strategy in combating the HIV epidemic. Currently there are 35 SACS, which are autonomous societies registered under the Charitable Societies Act and are decentralized. Each SACS has a governing body, its highest policy making structure, headed by the Minister of Health. It has on board representatives from key government departments to ensure greater flexibility and more effective program management, civil society, trade and industry, private health sector and PLHIV networks who meet twice a year. It approves new policy initiatives, the annual plan and budget, appoints statutory auditors, and accepts the annual audit report. For better financial and operational efficiency; the administrative and financial powers are vested in the Executive Committee and Program Director.

State lead partner (SLP): lead implementing partners of Avahan in six states and along the national highways who were responsible for implementing prevention interventions for female sex workers, high-risk men who have sex with men, people who inject drugs, and truckers through sub-grants to grassroots NGOs.

Syndromic case management (SCM) of STIs: a form of treatment based on the identification of consistent groups of symptoms and easily recognized signs ('syndromes'), and the provision of treatment that will deal with the majority or most serious organisms responsible for producing that particular syndrome. It is used in resource-constrained settings where health facilities do not have the laboratory equipment or skills required for etiological diagnosis of STI.

Targeted intervention (TI): a specific set of interventions in HIV/AIDS control programs to reach and provide services to key populations (KPs), implemented through partner NGOs/CBOs, The goal of the National AIDS Control Program (NACP) in India was to saturate coverage of KPs through targeted interventions.

Technical support unit (TSU): teams assigned to SACS to extend technical assistance in specified areas with the aim of achieving the goals and objectives of the National AIDS Control Program (NACP). The TSU is a coordinating body and not an implementing agency unless specifically requested. With prevention being the mainstay of the national strategy to control HIV/AIDS, TSUs focused on bringing technical and professional expertise in the areas of prevention (e.g., evidence-based strategic planning and resource planning, targeted interventions, care and support through community care centers, public-private partnerships, mainstreaming and capacity building).

Acronyms and Abbreviations

ACQUA	Aastha Continuous Quality Approach
AIDS	acquired immune deficiency syndrome
AP	Andhra Pradesh
APAC	AIDS Prevention and Control Project
APSACS	Andhra Pradesh State AIDS Control Society
ART	antiretroviral therapy
BCC	behavior change communication
CBO	community-based organization
CHC	community health center
CLO	Community liaison officer
CMIS	computerized management information system
COGS	Clinic Operational Guidelines and Standards
CT	*Chlamydia trachomatis*
DIC	drop-in center
DMC	designated microscopy center
DOTS	directly observed treatment, short-course
DSRC	designated STI/RTI clinics
ELISA	enzyme-linked immunosorbent assay
EQA	external quality assurance
EQAS	external quality assurance system
FIFO	first-in-first-out
FSW	female sex worker
FP	family planning

GC	*Neisseria gonorrheae*
HTC	HIV testing and counseling
HLFPPT	Hindustan Latex Family Planning Promotion Trust
HIV	human immunodeficiency virus
HR-MSM	high-risk men who have sex with men
HST	Humsafar Trust
HSV	herpes simplex virus
IBBA	Integrated Behavioral and Biological Assessment
ICTC	integrated counseling and testing center
IDU	injecting drug user
IPC	inter-personal communication
KHPT	Karnataka Health Promotion Trust
KP	key population
KSAPS	Karnataka State AIDS Prevention Society
LGBT	lesbian, gay, bisexual and transgender
MDACS	Mumbai District AIDS Control Society
MIS	management information system
MOU	memorandum of understanding
MSM	men who have sex with men
MSACS	Maharashtra State AIDS Control Society
MSW	male sex worker
M&E	monitoring and evaluation
NACO	National AIDS Control Organization
NACP	National AIDS Control Program
NGO	non-governmental organization
NRHM	National Rural Health Mission
ORW	outreach worker
OST	opioid substitution therapy
PCR	polymerase chain reaction
PEP	post-exposure prophylaxis
PHC	primary health center
PLHIV	people living with HIV
PPTCT	prevention of parent-to-child transmission (of HIV)
PTA	Prevention Technologies Agreement
PWID	people who inject drugs

RNTCP	Revised National Tuberculosis Control Program
RPR	rapid plasma reagin
RTI	reproductive tract infection
SACS	State AIDS Control Society
SBC	strategic behavioral communication
SCM	syndromic case management
SLP	state lead partner
SRH	sexual and reproductive health
STD	sexually transmitted disease
STI	sexually transmitted infection
SW	sex worker
TAI	Tamil Nadu AIDS Initiative
TANSACS	Tamil Nadu State AIDS Control Society
TB	tuberculosis
TCIF	Transport Corporation of India Foundation
TG	transgender
TI	targeted intervention
TSL	transshipment location
TSU	technical support unit
VCT	voluntary counseling and testing
VHS	Voluntary Health Services
WHO	World Health Organization